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Met vriendelijke groet,

ter verdere behandeling

☐ ter informatie☐ ter inzage

☐ gaarne advies ☐ gaarne retour

A. Thomasia



NEDERLANDSE ANTILLEN

Vertegenwoordiging van Nederland

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MINISTRY OF PUBLIC HEALTH AND SOCIAL **DEVELOPMENT — ENVIRONMENTAL DEPARTMENT**

MINISTERIE VAN VOLKSGEZONDHEID & SOCIALE ONTWIKKELING — AFDELING MILIEU EN NATUUR

Vertegenwoordiging van Nederland te Willemstad Scharlooweg 55

Willemstad

Curação

Nederlandse Antillen

Ons nummer: 332/2004
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Bijlagen: Nature & Environment Policy Plan Netherlands Antilles, 2004-2007

Onder verwijzing naar de Ministerraadbeslissing van 26 mei 2004 ter vaststelling van het Meerjarenplan Milieu en Natuur "Nature & Environment Policy Plan Netherlands Antilles, 2004-2007" (NEPP), bied ik u hierbij dit beleidsplan aan, met het verzoek bij te dragen in de financiering van dit plan uit de samenwerkingsmiddelen bestemd voor het programma duurzame economische ontwikkeling. Met de Directie Economische Zaken is afgesproken dat de beschikbare middelen voor duurzame economische ontwikkeling voor 43 % ten gunste van de uitvoering van het natuur- en milieubeleid zullen worden aangewend en voor 57% voor de uitvoering van het economisch beleid.

Onderdeel van het NEPP is onder andere een baseline studie 'State of the Environment of the Netherlands Antilles" die, mits de fondsen voor uitvoering beschikbaar zijn, er toe zal leiden dat beter gekwantificeerde streefwaarden/beleidsdoelstellingen geformuleerd zullen kunnen worden, aan de hand waarvan het milieu- en natuurprogramma aangepast zal kunnen worden bij het eerstvolgende programmaoverleg. Mogelijk knelpunt hierbij is dat de baseline studie, afhankelijk van de hoogte van de daadwerkelijk beschikbare middelen, een onevenredig groot deel van het budget in beslag kan nemen, ten nadele van de eigenlijke programmauitvoering. Gaarne willen wij u uitnodigen mee te denken over een mogelijke oplossing voor dit probleem.

Whiteman.

Hoogachte

Directeur Volksgezondheid

Nature & Environment Policy Plan Netherlands Antilles, 2004-2007

Nature & Environment Policy Plan Netherlands Antilles, 2004-2007

Willemstad, January 2004)

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Executive Summary

State of nature and environment

The state of nature and environment in the Netherlands Antilles urges serious policy actions.

The lack of a policy to prevent, reduce and recycle waste in the past has led to a steady growth of the waste volume, whereas the small islands have very little space for waste disposal. Adequate waste water management is essential to ensure healthy coastal waters and to protect the extremely sensitive coral reefs so important to tourism. The oil industry is important for the economy in the Netherlands Antilles. At the same time serious environmental effects of the production and potentially disastrous effects of inadequate transfer and transport of oil products warrants careful attention. Similarly, tourism is of great economic importance to all the islands, but can have serious environmental impacts. Where it is often the natural attractions that are an important motive for tourists to choose the islands of the Netherlands Antilles as a destination, preservation is essential while minimizing adverse environmental and societal impacts. Because of the limited resources of the small islands and the economic and intrinsic value of biodiversity, protection and conservation of nature is a priority. Finally, sustainable energy is a policy priority of several islands from a sustainable and economic point of view.

Challenges and bottlenecks

Balancing economic, ecologic and social/cultural aspects are crucial for sustainable development. If the ecology - nature and the environment – deteriorates or if socio-cultural values are neglected, the quality of life will directly diminish. Just as important, a decent existence for the whole of the population will not be possible without economic growth. The awareness of these interlinked aspects for sustainable development is not broadly present in the Netherlands Antilles.

Environmental policy must be closely coordinated with other policy areas such as public health, spatial planning, industrial development, agriculture and fisheries, and must be clear and transparent. In the present situation economic development and poverty alleviation have the highest priority for the Netherlands Antilles, but sustainable development is only possible in combination with sound environment and nature policy. For example, without corals there will be less stay-over tourists and less economic development or a polluted environment and disappearing nature will cause new forms of poverty.

To develop and implement policies and to increase the awareness of the importance of nature and environment remains a major challenge for the Nature & Environment Policy Plan. Priorities are well set after surveys, recommendations, and advice on environment and nature in the Netherlands Antilles, published over the preceding years. Legislation and standards are partly in place or in preparation and cooperation with stakeholders, island governments and NGO's has been developed. Now it is time to set the next steps.

Reassessment of the 2001-2005 Multi-Year Plan as well as the preceding period, led to the conclusion that these past years have served to provide a solid foundation for sound environment and nature policy. Inventories, assessments, analyses, policy documents, information materials, regulation & legislation and guidelines have been developed. Although not fully completed in all cases, it is time for a next step, which is to improve the ways to measure and monitor the state of the environment and the progress made in improving, preserving and restoring it. Further indicators, baseline values and targets need to be identified and formulated. Measurement is knowledge, and makes the problems and challenges tangible. It is the only road that leads to effective enforcement of regulations.

Objectives of the Nature & Environment Policy Plan

The NEPP provides the framework for environmental and nature conservation policy for the coming years. The priority activities are determined by the:

- Degree of endangerment to a sustainable future;
- Level of threat to the environment;
- Relation to and synergy with the economy;
- Commonality (i.e. experienced by all five islands of the Netherlands Antilles) of the environmental issues.

The objectives of the plan address the problems and challenges relating to:

- National Environmental Exploration;
- Waste and waste water;
- Oil refinery, oil transshipment and the environment;
- Sustainable tourism development;
- Nature conservation;
- Increasing public support for environmental care and nature conservation;
- Sustainable energy.

Activities within the Plan

A priority activity of the Nature & Environment Policy Plan is to carry out a detailed over-all view of the state of the environment and

the level of environmental awareness of the population. In order to better measure and monitor the effects of policy efforts and instruments, a more precise and complete picture of the present situation is needed. This will enable to target the policy efforts more efficiently and provide a better base for long term planning. A scientifically sound and practical study to determine the national state of the environment will be conducted, based on clear terms of reference.

In all the policy issues of the NEPP 2004-2007, projects and activities were identified and selected after consultations with the Islands Territories. These activities include developing standards, achieve target levels of waste management, increase the nature conservation, promote energy savings, coordination, education, and public awareness.

Implementation

Four policy advisors work together to implement the tasks set in this NEP Plan 2004 - 2007. Implementation of this policy plan will be in close cooperation with Central and Island Government departments, NGO's, private nature conservation organizations, related Dutch ministries, the private sector, the educational sector, the media, and neighborhood organizations.

A source of concern is the very limited availability of capacity for the many tasks in the field of environmental and nature conservation. Various islands and NGO's have difficulties in finding qualified professionals, and already in the present situation there is insufficient capacity to deal with all environmental issues.

Budget and financing

Taking into account the financial limitations of both the Netherlands Antilles Government and external sources as Dutch development cooperation funds, strict priorities in projects and activities were set. This resulted in an estimated budget for the NEPP of NAf 11.2 million for the coming years, which is considered a bare minimum to be able to execute activities and meet the objectives and targets. Where the contribution of the Central Government is calculated at NAf 1,5 million, it is anticipated that some NAf 9,7 million will come from donor funds. Regarding the Dutch development cooperation funds, the nature and environment plan and the economic pro-gram of the Central Government share the available budget for sustainable economic development, and it was agreed upon to set an a-priori division for the available funds.

Effects, monitoring and evaluation

Where possible in this Nature & Environment Policy Plan 2004-2007, output and effect indicators are introduced for each of the priority

themes. In the future more precise effect indicators will be added to the Plan after the "National Exploration of the State of the Environment" is executed. The National Exploration of the State of the Environment will provide more clear indicators and base-line data, and better tools to measure developments, as well as monitor the effects of policy actions.

Introduction

A healthy environment and a rich diversity of nature are requirements for the existence and wellbeing of humankind, and for economic development. Considering the far-reaching impacts that humans have on nature and the environment, they have the responsibility to protect and wisely manage them.

In art. 2, par. e.10 of the Islands Regulation Netherlands Antilles (ERNA, 1998), the environmental tasks of the central government are specified as follows: "environmental and nature management and conservation as they derive from treaties"

Based on this, and the resulting legislation (the yet to be passed National Environment Ordinance¹, and the National Nature Conservation Ordinance² passed in 1998) the central government is legally obliged to set out a policy with regard to management and conservation of nature and the environment.

In various official statements of the Government of the Netherlands Antilles the pursuit of sustainable development has been expressed. Experience teaches however, that the practical implementation of this ambition is ever so difficult. To be sure, the catchword 'sustainability' has become common property, but as yet lacks broad support in practice Taking care of nature and the environment generally yields rewards only in the long term, while short term needs usually receive more attention. Because nature and environment usually lose out when short term exigencies get priority, it is consequently the environmental sector which tries to concretize the pursuit of sustainability.

The National Environment Ordinance is ready and is in the process of being passed

The National Nature Conservation Ordinance was passed by the National Parliament in 1998 (PB 1998, 49), and came into force on Pebruary 1, 1999. On Pebruary 15, 2001 a number of amendments were passed by Parliament, in order to more closely follow the various treaties.

The lack of a policy to prevent, reduce and recycle waste in the past has led to a steady growth of the waste volume, whereas our small islands have very little space for waste disposal. This growing problem must be addressed. The commonality of the waste water problem, posing a threat to environment, biodiversity, public health, and economic development potential also demands decisive action.

The importance of the oil industry to the economy and as employer in the Netherlands Antilles (refinery and oil transshipment terminal in Curação, oil transshipment terminals in Bonaire and in St. Eustatius), with its flipside of serious environmental effects of the production and disastrous effects of inadequate transfer and transport of oil products, also warrants careful attention.

Similarly, tourism is of great economic importance to all the islands, but can have serious environmental impacts. In order for it to be sustainable its effects on environment, society, and planning must be carefully managed or prevented. Tourists choose the islands of the Netherlands Antilles as a destination because of their natural attractions, for one thing. It is essential to preserve that attraction while minimizing its environmental and societal impacts.

Protection and conservation of nature, the fourth priority theme, is not only important because of the enormous economic value of biodiversity, both direct and indirect, but also because of its intrinsic value. In addition it is a very limited resource on our small islands, so it needs to be preserved.

The fifth theme, increasing the support for environmental care and nature conservation is clearly a basic requirement if the policy is to be successfully implemented. If there is no awareness of the need for environmental care and nature conservation, one cannot expect anyone to make any effort towards it.

Considering the significance of sustainable energy to sustainable development, the rapid developments in the field and the wish of several islands to provide for their energy needs in a more sustainable way, the subject of sustainable energy was added as sixth main priority theme in 2000 when the second multi-year environmental policy plan was written.

The selection of these priority themes means that other environmental themes—important as well—will receive less or no attention. Things like transport and traffic, noise pollution, or air pollution. Because of the limited capacity of the central and island governments however, prioritization is unavoidable. At the same time the islands are counted on—within the limits of their capacity—to address some of the additional environmental problems in their island policies if possible. Sometimes a little effort can carry far, e.g. in the area of traffic and air pollution by improved checks of the exhaust

gases during the obligatory vehicle inspections. In such cases the central government will assist by providing standards.

Based on the Contours Paper several other policy documents were prepared during the term of the Contours Paper, setting out specific policy in several of the priority themes, i.e. "Framework for Waste Management Policy of the Netherlands Antilles "1, "White Paper on Sustainable Tourism"2, and "Nature Policy of the Netherlands Antilles"3

In 1999 a progress report on environmental and nature conservation policy was prepared⁴. This report looks at what has been achieved, or was not achieved in the area of environment and nature conservation over the preceding period, and which obstacles will have to be surmounted if the objective of better environmental care and nature conservation is to be achieved.

In 2001 a new Multi-year plan for environmental and nature conservation policy⁵ was produced based on the previous Contours Paper and its 1999 evaluation. It provides the framework for environmental and nature conservation policy for the period 2001-2005, and added sustainable energy as a sixth priority theme. Like the preceding Contours Paper, a major part of the financing for its implementation again came from the cooperative means of the Dutch Government through the Ministry of Government Reform and Kingdom Relations (BVK), based on the recognition that environmental and nature conservation policy are essential to sustainable development. Because of delays in the realization of the financing, implementation of the new Multi-year Plan did not really start until the last quarter of 2003.

In reassessing the Multi-year Plan at that time, which should have been its halfway mark, it became apparent that notwithstanding the lack of funding, nevertheless some important results were achieved in the period 2000-2003, i.e. after the 1999 progress report. Partly these resulted from activities set into motion as part of the first "Contours Paper", partly they were realized with the very limited

¹ "Raamwerk van het afvalbeleid van de Nederlandse Antillen. Dept. of Public Health and Environmental Hygiene, Environmental Section. Willemstad, October 1997.

² Nota Duurzaam Toerisme voor de Nederlandse Antillen. Environmental Section, Dept. of Public Health and Environmental Hygiene. Willemstad, August 1998.

³ The National Nature Policy Plan ["Natuurbeleid van de Nederlandse Antillen – aan de dageraad van een nieuw millennium". Environmental Section, Dept. of Public Health and Environmental Hygiene. Willemstad, February 2000] became official policy by Ministerial Decree of February 1, 2000, No. 538/JAZ.

⁴ Voortgangsrapportage van de Contourennota van het Milieu- en Natuurbeleid van de Nederlandse Antillen. Environmental Section, Dept. of Public Health and Environmental Hygiene, Willemstad, April 1999.

⁵ Meerjarenplan Milieu- en Natuurbeleid Nederlandse Antillen, 2001-2005. Dept. of Environment, Ministry of Public Health and Social Development. Willemstad, March 2001.

means available and with the help of alternative or third party external funding.

Thus the overview of the waste problem in the Netherlands Antilles was greatly improved, with inventories made of the waste situation in Saba and St. Eustatius and corresponding action plans formulated. An implementation plan for the recycling and adequate disposal of car wrecks was drafted with support from the Dutch ministry of environment (VROM). An inventory of hazardous waste was completed in Curação. The bilateral agreement for international transport of hazardous waste (under the Basel Convention) between the Netherlands and the Netherlands Antilles has been renewed. In 2002 the 4th Waste Management Conference took place in Curação. At that conference, updates were presented on the actual waste management situation on all the islands including Aruba, and the recycling of car wrecks was discussed. As to legislation, a model island ordinance for waste management was drafted, providing a template for the island authorities to regulate the collection and the disposal of solid waste. Similarly a model waste water management ordinance was produced.

On the nature conservation front much was achieved as well. Two additional Nature Forum meetings took place after 1999. One in Curação in 2000, the third such meeting since 1996, which resulted in a document clearly elaborating the amount of sustainable funding needed for the survival and basic infrastructure of the nature conservation management organizations of the Netherlands Antilles1. The meeting also established a Netherlands Antilles Nature Conservation Initiative (NANCI) with a broad communication network. The fourth Nature Forum meeting took place in St. Maarten in 2002, and established the importance of monitoring for nature conservation. It also reaffirmed the urgent need for the establishment of a trust fund for nature conservation in the Netherlands Antilles, and a working group further elaborated terms of reference for a trust fund study. Together with the 'Financing Plan' produced by the Nature Forum 2000, this provided the basis for the long intended study on how to establish such a trust fund, and which finally started with Dutch cooperative funding in 2004. Meanwhile the nature conservation organizations in St. Eustatius and St. Maarten, both on the brink of closing down due to lack of sustainable income, were kept alive partly with Dutch cooperative funding and partly with financial support from the respective island.

¹ Begroting en Financieringsplan voor de beheerskosten van belangrijke natuurgebieden van de Nederlandse Antillen. Publication resulting from the National Nature Forum 2000. Published by the Dept. of Environment, Ministry of Public Health and Social Development. Willemstad, December 2000.

The Netherlands Antilles Coral Reef Initiative (NACRI), established by the Nature Forum of 2000, as part of the NANCI, was strengthened through two conferences organized by MINA with funding from local NGO's and private sector sponsors. As a direct result an extensive coordination and communication network for marine conservation efforts on the islands, including neighboring countries and international experts and organizations, was established. The NACRI further identifies and elaborates projects and activities focused on coral reef conservation.

A survey of the fishery of the Saba Bank was completed and prepared the way, not only for a similar survey in Curaçao, but also for a further in-depth survey of the Saba Bank still to be realized, and also led to the production of a video on the fishery and biodiversity resources of the Bank that was broadcasted by the various island TV stations and also featured during the 6th Conference of Parties of the Convention on the protection of Biological Diversity (CBD) in the Netherlands in 2002.

Substantial progress was made on the subject of sustainable tourism. Both in Bonaire and Curaçao a number of hotels, tour and dive operators were joined in the "Naturally Antilles" project and environmental information was provided to tourists (as yet only in Dutch) through a brochure, certificates at participating operators, information pillars at participating hotels, and an extensive website www.natuurlijkantillen.info. At the same time the operators and hotels were trained in environmentally more responsible management.

In 2001, through its extensive and active communication network with environmental organizations on all islands, MINA was able on only one month's notice, to direct more than NAf 600,000 of unspent Dutch cooperative funds to more than 25 environmental projects from a wide variety of NGO's from all islands, supporting nature conservation management and environmental awareness. MINA subsequently monitored the implementation of those projects, which (with only one exception) were all completed successfully.

The above are just the main results of MINA's efforts, in addition the National Environmental Ordinance was completed and now ready to be passed; the National Nature Conservation Ordinance was amended to better follow the various treaties; the Netherlands Antilles took a leading role in regional cooperation for the environment, in particular through the Cartagena Convention and its three protocols: hosting the Oil Spill protocol's regional activity center REMPEITC in Curaçao, providing strong support for the SPAW protocol in working groups and as chair of both its Conference of Parties and its Scientific and Technical Advisory Committee (STAC) in 2002 and 2003 and hosting the second STAC meeting in Curaçao in 2003. The

Netherlands Antilles also became actively involved in the Inter-American Convention for the Protection and Conservation of Sea Turtles (IAC), helping to prepare the consultative and the scientific committees, and rules of procedures under the protocol. Finally, MINA has built up a very good working relationship with the nature conservation organizations, the waste management organizations, and the environmental departments of the islands, involving them closely with central government policy, supporting and stimulating them, and providing funding for a large number of small projects through the years through the KNAP and MINA Funds.

All in all, reassessment of the 2001-2005 Multi-Year Plan as well as the preceding period, led to the conclusion that these past years have served to provide a solid foundation for sound environment and nature policy: inventories, assessments, analyses, policy documents, information materials, regulation and legislation, guidelines, etc. Though this may not be fully complete in al cases, it is nevertheless time for the next step, which is to improve the ways to measure the state of the environment and the progress made towards improving, preserving or restoring it. Further indicators, baseline values and targets must now be identified and formulated. Measuring means knowing, and measuring means making the problems tangible. It is the only road that leads to effective enforcement of regulations.

This conclusion led to the decision that instead of revising the existing Multi-Year Plan, a new Nature & Environment Policy Plan (NEP Plan) 2004-2008 would be made, incorporating clear output and effect indicators where possible, and acknowledging that a point has been reached where a "National Exploration of the State of the Environment", is needed to provide clear indicators and base-line data, and better tools to target problem areas or obstacles.

As did the former multi-year plan, the NEP Plan provides the framework for environmental and nature conservation policy. In chapter 2 the premises and strategy are set out. In chapter 3 each of the priority environmental themes are discussed in more detail. Subsequently additional instruments, essential for effective environmental policy implementation, are discussed, starting with education and public awareness and involvement in chapter 4, followed by chapter 5 dealing with legislation, environmental standards, and enforcement. Chapter 6 lists the cooperative mechanisms with other departments, NGOs and other countries. Funding for the implementation of the policy is discussed in chapter 7. Chapter 8 discusses the implementation and the specific activities resulting from the NEP Plan. Chapter 9 finally, addresses monitoring and evaluation and a National Exploration of Nature and the Environment. An explanatory list of the many acronyms used in this document is provided as chapter 10

The NEP Plan 2004-2008 again serves as an umbrella for various thematic policy plans and reports such as the "Framework for Waste Management Policy", Sustainable Tourism White Paper", and "Nature Policy of the Netherlands Antilles". Year Plans will detail specific activities to be implemented as part of the overall NEP Plan, and will provide progress reports of ongoing or completed activities.

2 Premises and Strategy

Starting point for Environment and Nature Conservation Policy is the sustainable development of the Netherlands Antilles, constrained by the special issues of Small Island Development States (SIDS).

Sustainable Development is defined as development tailored to meet the needs of the present without compromising the abilities of future generations to meet their needs. Small Island Developing States (SIDS)¹ characteristically have specific geographical, social, and economic constraints that impede their aims to consistently achieve a policy of sustainable development. These constraints include a restricted and limited surface area, very little "buffer" area, activities on land often directly influence the surrounding sea, and vice versa, a limited range and reserves of natural resources, a strong dependence on imports especially, but also on experts, a very small economic home market, and a limited size of the agricultural sector.

Three aspects are crucial for sustainable development; the economic aspect, the ecological aspect, and the socio-cultural aspect. If one of these elements is neglected any development with not be sustainable. If the ecology—nature and the environment—deteriorates then the quality of our lives will be diminished if socio-cultural values—traditions, morals, social controls—disappear, the quality of our lives will also be affected; and finally a decent existence for all will not be possible without economic growth.

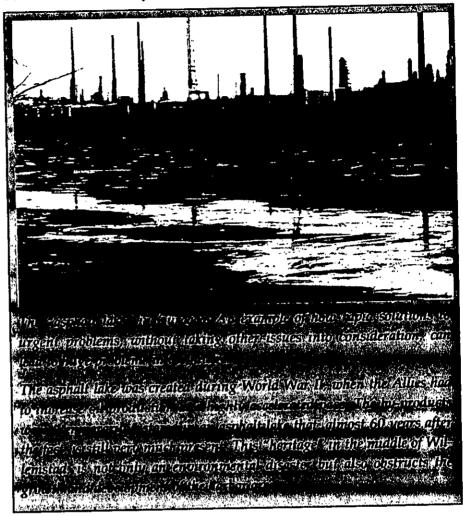
The point then is the need to make choices, to seek a balance in order to realize sustainable development, while maintaining continuous vigilance to ensure that ecological, socio-cultural, and economic objectives are all served. Environmental policy must therefore be closely coordinated with other policy areas such as public health spatial planning, industrial development, agriculture and fisheries and must be clear and transparent.

In the present situation economic development and poverty alleviation have the highest priority for the Netherlands Antilles. Notwithstanding this urgency however, sustainability must not be lost from sight. Sustainable economic development, including poverty alleviation, is only possible with sound environment and nature policy. Without corals there will be less stay overstourists eless economic development); a polluted environment and disappearing nature will

UNCED, 1992 "Agenda 21". Rio de Janerio.

Used here in a very broad sense, including biodiversity, natural resources and environment

cause new forms of poverty as healthy air and wondrous nature will become available only for the rich.



Environmental care and nature conservation are prime examples of long term issues; there are few other concerns that have comparably little direct benefit while being of comparable significance to the far future. Sustainable economic development then, means economic development subject to conservation and protection of the values of our society, and conservation and protection of our biodiversity and healthy environment. As especially the latter two concerns are not nearly as self-evident as the need to protect norms, values and traditions, they deserve a closer look.

Tourism is one of the most important pillars of the economy of all our islands. To achieve economic development tourism must be developed. If this is not subject however, to conservation of biodiversity and environmental care, the development will be self-defeating. It will be clear that for a tourism destination it is of crucial importance that both nature and the environment are healthy and protected, because there will be no attraction for tourists otherwise. But what is important for tourism, i.e. for other people, is of course of

equal importance to us. We too after all would rather live surrounded by beautiful and diverse nature, would rather breathe clean air and would rather not be poisoned by pollution of the soil or of the groundwater.

Against this background of striving to achieve sustainable development, the implementation of policies and priorities set out in this multi-year plan will continue steadfastly over the coming period. Legislation, in particular the development of standards and regulations and their enforcement will receive more attention over the coming period. For this it will be necessary to determine baselines, target values and effect indicators.

Over the past years much was done to get a better idea of the existing situation with respect to natural resources and environmental problems. Surveys and inventories were performed. Still, a detailed over-all view of the state of our environment and the level of environmental awareness of the people is missing. To better measure the effects of our efforts we need to get a more precise and holistic picture of the present situation, to collate the available data and fill in the gaps. This will also enable us to target our efforts more efficiently at problem areas and provide a better base for long term planning. Over the coming period then, a scientifically sound and practicable study, to determine the national state of the environment will be conducted, based on clear terms of reference.

One of the most important instruments to achieve set objectives, especially considering the limited capacity and means available, is good cooperation among organizations and institutions that are active in the area of environment and nature conservation. Much attention will consequently be devoted to stimulating and facilitating such cooperation.

"National Exploration of the Environment" terms of reference and study

3 The Priority Themes

3.1 Waste and Waste Water Management

3.1.1 Waste Management

The primary aim of waste policy is to reduce the amount of waste More specifically the policy will aim for prevention, reuse or recycle and adequate final disposal.

There is a good overall picture of the waste issue; management, the amount of waste, and its composition. Such data are essential before formulating policy aims. Over the past years substantial progress has been made in proper collection of waste; however reductions of waste destined for final disposal and adequate final disposal itself have lagged behind. Waste management will be approached in two stages first the basic level—the minimal facilities for well organized collection and proper dump management—and secondly the target level—the reduction of selected waste components with waste preferably being separated at the earliest stage (criteria for the selection of waste components which should be reused or recycled are: the volume market opportunities, and the degree of environmental threat. Local reuse has preference over reuse elsewhere

Environmental standards for appropriate final disposal will be de fined and alternatives for the present final disposal will be studied

Hazardous waste will get special attention: Recently an inventory was made in Curação of the amount, the composition and the possibilities to separately collect and finally dispose of these hazardous waste components. It will be determined whether a similar inventory on the other islands is necessary, or whether the information of the Curação study can be extrapolated. The bilateral agreement between the Netherlands Antilles and the Netherlands concerning the international transport of hazardous waste, as based on the Basel Convention, provides the opportunity to offer this type of waste for proper final disposal in the Netherlands. For quite some time the Netherlands Antilles have indicated that they will ratify the Basel Convention. This intention will be realized, depending as it does on the passing and coming into force of the National Environment Ordinance, national legislation on hazardous waste which still needs to be drafted, and the installation of an administrative organization to implement and enforce the regulations.

For the actual implementation of policy, custom-made instruments—policy framework, legal, financial and social instruments will be developed. Not all the islands have a waste ordinance and an island policy plan in place. These islands will be stimulated to im-

Assist islands in achieving basic level and target level waste management

Standards and regulations of the standards are regulations of the standards and regulations of the

Management plan for hazard

Promote ratification of Basel
Convention

Promote structured waste policy plans and adoption of island waste management ordinance Support for AMUST (cooperation & exchange)

plement such instruments in a structured way. A model island waste management ordinance has already been developed.

Cooperation between the islands of the Netherlands Antilles, cooperation with Aruba and regional initiatives on waste will be promoted by the central government. AMUST, Asosashon Maneho Uni di Sushi i Tecnologia, an association of the directors of the government-owned waste companies of the islands and Aruba, which was established in 1997, can play a central role in this. The aim of AMUST is to promote efficient waste removal and sanitation tasks through cooperation between the members. The past years AMUST has achieved good results particularly on a non-capital intensive level and should receive the necessary support to continue this course of action. Special attention should be given to cooperation in the area of recyclable waste components and problematic waste components, and cooperation in the field of organization, expertise and equipment.

To monitor the progress of policy implementation frequent consultations will be organized, particularly between the central government and the island governments.

3.1.1	OUTPUT-INDICATORS	2004	2005	2006	2007	EFFECT INDICATORS:
	Analysis of final disposal ¹	✓.	1			Adequate disposal of solid waste ²
	Environmental standards for final disposal	-	✓		Γ	Improved policy instruments
ı	Basic levels for final disposal achieved ³			1	1	Adequate disposal of solid waste ²
	Hazardous waste action plan4		1	1		Proper disposal of hazardous waste ²
	Island waste policy plans ⁵	~	1	1		Improved policy instruments
	Island legislation on waste ⁵		✓	✓	1	Improved policy instruments
	Improved cooperation and coordination	1	✓	1	1	At least 1 yearly meeting of AMUST

¹ Implementation differs per island, Bonaire and Curação 2004, St. Maarten, St. Eustatius, and Saba not until 2005.

² Baseline indicators must be established by the 'National Exploration of the State of the Environment', after which target values can be formulated.

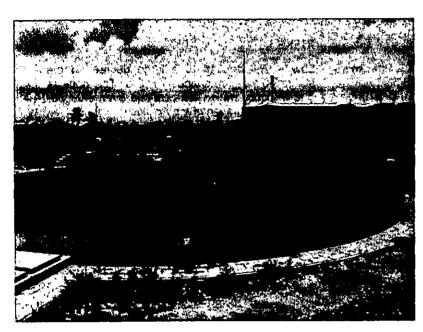
^{3 2006} Saba, 2007 St. Eustatius; Bonaire, Curação, and St. Maarten have already achieved basic level.

Expected to be ready for Bonaire and Curação first, followed a year later by the windward islands.

⁵ This output cannot be guaranteed by the central government as it is an island competence; the central government can only facilitate and stimulate.

ASSUMPTIONS	RISKS
Continued cooperation of waste management companies in AMUST	Low – Will depend to a large degree on the status of the Netherlands Antilles. The hope is that the cooperation will continue even after potential disintegration of the Antilles
Availability of sufficient means and capacity on all islands	Medium - This may be problematic especially on the smallest islands, but can be overcome if sufficient funding is available
No major hurricanes, causing major increases in waste volume.	Low-to-medium risk - Statistically every 5 years.

3.1.2 Waste Water Management



Water treatment plant at Klein Kwartier, Curação

The primary aim of the waste water policy is to promote the adequate disposal and treatment of waste water.

It should be made clear right off that construction of an extensive infrastructure on all the islands, because of the enormous investments necessary for construction and maintenance, is not aimed for. Construction and maintenance of sewerage and treatment facilities is costly because of the widely spread housing and urban development, the hilly country and the geology of the islands.

Assist islands with wastewater management

Capacity building waste water personnel

Standards and regulations for waste water disposal

The island governments should take the lead in waste water management. The central government will assist them in doing so. Spatial planning aimed at keeping industrial projects, public housing and large scale tourism projects within reach of treatment facilities should be promoted. Alternatively such developments should install their own (joint) infrastructure to adequately fulfill their needs. The coming years the emphasis will be on solving constraints in waste water management and infrastructure and also the introduction of policy instruments. Internships and training of personnel will be promoted.

Taking into account the detrimental consequences for the environment, it is necessary to set standards for waste water disposal in order to prevent or reduce those consequences. Particularly in coastal areas where sewage directly (i.e. outfalls) or indirectly (seepage, i.e. from cesspits or after reuse of treated sewage) affects coral reefs which are extremely sensitive to nutrients and pollution. The obligation to set such standards also results from the Third Protocol of the Cartagena Convention on Pollution from Land-based sources and activities (LBS protocol). The aim of this Protocol, which was signed by the Netherlands Antilles on October 6, 1999, is to prevent, reduce and control pollution of the marine environment by land-based sources and activities.

The establishment of legislation on waste water will be obligatory for island governments as is stipulated in the National Environment Ordinance (which still awaits approval) and a model island ordinance has been drafted already. This model aims to protect the envi-

Promote island waste water ordinances on all islands

ronment by reducing or preventing pollution by waste water and should at least contain provisions for a waste water plan, and should also regulate discharges into the soil, open water, the sea and sewer age.

				oje. Orano ba na ad	
3.1.2	OUTPUT-INDICATORS	2004	2005	2006	EFFECT INDICATORS:
; ;	Standards for waste water disposal				percentage adequate treatment/disposa of waste water (not always necessarily after high quality treatment)
	Island legislation on waste water ²			/	Better policy instruments
:	Capacity building opportunities	1	2	2 2	Number of exchanges of knowledge/ expertise
	ASSUMPTIONS			RIS	KS
	Adequate legislative capacity or lands	n the	. Kud	to p MIN land	medium. Although it will be a cause for the islands stay sufficiently motivated ush the legislation it will be given priority. A has also provided a template for the iss, making the work much easier. Bonaire St. Maarten are already working on it.

¹ Baseline indicators must be established by the 'National Exploration of the State of the Environment', after which target values can be formulated.

² This output cannot be guaranteed by the central government as it is an island competence; the central government can only facilitate and stimulate.



Dead bird floating in the permanent oil slick on the western side of the Schottegat in Curação

Cost-benefit analysis of oil industry Curação

3.2 Oil and the Environment

Oil processing, transshipment, distribution and use of oil products are important economic activities for the Netherlands Antilles. To mitigate the major environmental impacts resulting from this inherently unsustainable industry, and to maintain a balance and mitigate conflicts with other economic activities and other sectors such as tourism and public health, it is paramount that its environmental consequences are taken care of in a thorough and timely fashion.

3.2.1 Oil Operations

Environmental standards have to be established for processes and installations of refineries, transportation, storage and distribution of oil and oil products within the Netherlands Antilles. The objective for such standards is to establish minimum regulations to which installations have to adhere in order to keep environmental and health damage to an acceptable level.

Although the need to regulate the environmental impact of the refinery in Curaçao has been the subject of much discussion, no study has ever been done of the investments that would be needed to bring the refinery up to par with modern environmental re-

quirements, or the costs of clean-up operations, soil treatment, etc. after the end of the economic life span of the refineries and oil storage facilities, and the social, economic and ecological benefits of such investments. Recently the Refineria di Korsou commissioned a study of the economic benefits of the oil industry in Curaçao; however, none of the other aspects were addressed.

In order to fill in these knowledge gaps, an in-depth cost-benefit analysis will be executed for Curaçao, designed to assess and quantify the costs and benefits of the oil refinery in the area of economics, spatial planning, public finance, public health, and environment; to develop a decision support model which takes into account the various socio-cultural, economic, financial, and environmental aspects and their dynamics; and to develop a number of scenarios to support the decision making process of the government.

Aid inspection of large facilities in the small islands

The transport, storage, transfers and transshipment of oil require a nuisance permit. Such permits, whether already issued or being considered, need to be monitored and enforced. This is a task of the island territories; however, the smaller islands in particular need assistance in this. If the environmental and external costs are known a better price for the permit can be calculated; this would be beneficial for the whole island both in the short and in the long run.

The process of collecting and processing of used oil will have to be optimized for all islands and supported by regulations. In order to comply with international requirements to minimize oil pollution from operational processes in shipping, Annex I of MARPOL 73/78 needs to be implemented. In addition to the installation and use of port reception facilities, this also includes the regular inspection of the ships oil logs. The primary agency responsible is the Directorate of Shipping and Maritime Affairs together with the island harbor authorities; the Coast Guard of the Netherlands Antilles & Aruba can also provide support.

3.2.2 Legacy contamination

During the many years the oil sector has been active in the Netherlands Antilles, a legacy of oil contamination with a permanent character has developed. Although the first priority is prevention of additional contamination; the existing contamination also needs to be taken care of.

Identification and mapping of contamination as part of "national environmental explora-

tion

Locations and levels of contamination need to be mapped, and a baseline situation needs to be established. This should be part of the "national environmental exploration". In cases of transfer of ownership a detailed mapping is particularly important. The cost of such localized and specific studies should in principle be borne by the companies involved. Once the levels and characteristics of the contamination are known further decisions can be made.

3.2.3 Oil Spill Preparedness and Response

Responsibility for the coordination of oil spill preparedness and response at sea on a national level lies with the Directorate of Shipping and Maritime Affairs. The directorate for Public Health to participates in this out of its own policy responsibility. The following issues have priority.

Full Implementation of 1992/CLC and 1992/Fund conventions

Cleanup and compensation costs in case of an oil spill can be covered through insurance regulated by the Civil Liabilities Convention (CLC) with added coverage in case of a large spill by the International Oil Spill Fund. Although all national legislation implementing these Conventions has been passed, the Netherlands Antilles are not yet a full partner in the fund. This can have grave consequences if a large oil spill occurs. Considering the oil transport related activities on several of the islands and the position of the islands with respect to oil shipping lanes, the chances of a large oil spill occurring in the Netherlands Antilles are significant. Therefore, full compliance to the requirements of the conventions will be promoted.

Oil Spill Contingency Plans



Oil spill in St. Eustatius in 2002. Dispersants were used (background) in shallow water where serious damage to sea grass beds or corals may result

Sensitivity mapping for all islands The oil spill contingency plans originally compiled in 1992 as part of the implementation of the cooperative Oil Spill Protocol of the Cartagena Convention, have to be updated. STI-RANA, the national foundation for disaster preparedness, has taken the lead in this. These plans should not only provide for the organizational structure for actions in mitigating oil spill effects, but also need regulations about what kind of technique to use in which areas; particularly in the case of the use of dispersants, which can have seriously damaging effects in coral reef, sea grass or mangrove areas.

Sensitivity mapping, identifying areas of more or less vulnerability, can en-

sure that spill prevention and cleanup actions can be implemented in the most effective and efficient way. In this planning period sensitivity mapping of all islands should be finalized.

Protocols for rapid processing of material and personnel input in case of a spill should also be included in the oil spill contingency plans. Availability of sufficient equipment and adequate training of personnel to combat spills should be a requirement for the permit of any oil reception and transport facility. For training and advice, cooperation with REMPEITC, the UNEP/IMO regional activity center for oil spill emergency information and training, is important.

3.2	OUTPUT-INDICATORS	2004	2005	2006	2007	EFFECT INDICATORS:			
	Cost benefit analysis of oil in- dustry			1		At least 10 decision makers atter			
3.2.1	Decision support model for pol- icy makers		-		~	At least 10 decision makers attending the presentations			
	Assistance to islands with inspection of large oil facilities		3,5		1	At least one inspection every two			
	Implementation of Annex I of MARPOL 73/78 ¹	13.		1	~	adequate port reception facilities on all islands			
3.2.2	Map of soil and ground water pollution ²		1	~	1	Cleanup policy drafted			
	Sensitivity maps ²			1	1	Improved contingency plans			
3.2.3	Data submitted to CLC and Fund conventions	Y	3			Netherlands Antilles realizes full partnership in International Oil Spill Fund			
	ASSUMPTIONS	RISKS							
	Results of a cost-benefit analysis will actually be used for economic planning	low-to medium risk: in case of negative results (costs higher than benefits), some decision makers will be reluctant to concur out of tradition and lack of flexibility in the labor force;							
	Clean-up of legacy contamina- tion is fundable	medium risk: culprits have often left or are legally not liable							
	No major oil spill will occur	low-to medium risk; The Caribbean is considered a high risk area as 30% of the worlds oil passes through; however for the last few decennia is has been spared major spills.							
	a major spill will not occur be- fore being an actual partner in the Fund	low risk: full compliance can be prompt							

¹ The primary agency responsible is the Directorate of Maritime Affairs, and fals under the comp[etence of the island harbor authorities; MINA can only stimulate and facilitate

² implementation will be different for each of the islands; Curação, Bonaire and St. Eustatius with their oil facilities will be first, St. Maarten and Saba will follow

3.3 Sustainable Tourism



Reefs are an extremely important resource for tourism

Tourism, environment and nature are inextricably linked. Tourism is also one of the most, if not the most, important pillars of the economy of all our islands. Nowhere is the link between economic development and environmental care and nature conservation as clear and obvious as in tourism. It will be clear to anyone that it is crucially important to a tourism destination that nature and environment are healthy and that their qualities are controlled, because otherwise there would not be any attraction for tourists. Tourists are

after all drawn by special or unique nature values and beautiful natural scenery, and demand a clean environment. A polluted environment or lack of natural values means an end to tourism, particularly since tourists from the western world, where most tourism originates, are increasingly demanding natural values, clean swim water, and fresh air.

Sustainable economic development requires sustainable tourism, and that requires a balance between tourism and nature, while socio-cultural aspects should also not be forgotten. Economy (tourism) depends on ecology (nature and environment). The primary objective then is to seek a balance between tourism and nature and the environment—ecologically sustainable tourism. This objective is described in greater detail in the "Sustainable Tourism White Paper", the result of a Sustainable Tourism Conference in 1998 which brought together experts from both the environmental sector and the tourism sector from every island.

During a national workshop sustainable development in October 1999, where among others, experts from the tourism sector again discussed sustainable tourism, the principles and conclusions of the Sustainable tourism white paper were reaffirmed. They also identified a number of priorities including the implementation of the policy as set out in the sustainable tourism white paper²

¹ Nota Duurzaam Toerisme. Environmental Section, Dept. of Public Health and Environmental Hygiene, Willemstad, April 1999.

² Verslag Nationale Workshop Duurzame Ontwikkeling. Sectie Milieu en Natuur, Dept. Volksgezondheid en Milieuhygiëne, Willemstad, November 1999.

Regular Sustainable Tourism Forums

In the coming years implementation of this policy will continue, keeping in mind local cultural values and with attention for the individual. In particular an effort will me made to organize regular conferences bringing together the tourism sector and the environmental sector to further discuss how to work towards sustainable tourism and to formulate a sustainable tourism action plan.

Three activity areas can be distinguished:

- Promoting good planning of tourism development, closely coordinated with island nature plans and nature conservation management.
- Promote sustainability in the industry
- Stimulating the tourism sector itself to act environmentally responsible and protect nature in all aspects

Inform local and foreign tourists

Improving the information available for tourists about acting environmentally responsible and protecting nature. This includes information targeted at local tourists, i.e. island residents visiting the beaches or recreating in other natural parts of the island.

3.3	OUTPUT-INDICATORS	2004	2005	2006	2007	EFFECT INDICATORS	
	Information (brochures, leaflets)	3000	5000	2000	-	More awareness in local and foreign tourists ¹	
	Conferences in sustainable tour- ism and proceedings	1		1	_	Increased awareness of the for sustainability in the sector	
	number of operators participating;	+3	+3	+3 ,		Increased sustainability of sector operations	
	articles/reports of MINA per year	3	3	3	3	More awareness in local and foreign tourists ¹	
	number of best practices;	+1	+1	+1	+1	Increased sustainability of sector operations	
	ASSUMPTIONS		RISKS				
r	Tourism continues to grow	Low: the tourism figures for the past few years indi- cate that the Netherlands Antilles continues to strongly draw tourists.					
	"green" management and focus on nature conservation continue to be positively appreciated by a sizable number of tourists			ithough	westen onsibili there	n tourists no longer value envi- ity as highly as in the past, it is are no indications that this will	

¹ Baseline indicators must be established by the 'National Exploration of the State of the Environment', after which target values can be formulated.

3.4 Biodiversity Conservation and Management



Endangered endemic Bonairean 'Lora' or Parrot(Amazona barbadensis bonairensis)

Biological diversity (in short biodiversity) is the diversity between and within species, the diversity of communities of landscapes, habitats and ecological systems. For life, including man, to thrive and survive, this diversity is essential. Diversity is needed for stability and adaptation of species and systems for their survival and evolution. Biological diversity also has its own intrinsic values, but from the viewpoint of mankind, biological diversity provides many services: air to breathe, food to eat and water to drink, but also resources for industrial processes, pharmacy, tourism and all other forms of human endeavor. The conservation of biological diversity is an integral part of sustainable development.

In an analysis of so-called biodiversity hotspots,

areas with exceptionally high biodiversity, under threat, the Caribbean scored as one of the highest (Myers et al., 2000). As far as marine biodiversity is concerned, the waters of the Southern Caribbean, including the area surrounding Bonaire and Curaçao, are considered the second highest in the Atlantic Basin (FAO, 2003). This emphasizes the importance of biodiversity conservation in the Netherlands Antilles, not only for the sake of its citizens, but also as a responsibility to safeguard a global heritage.

3.4.1 Implementation of the National Nature Policy Plan

The present National Nature Policy Plan¹, decreed by Ministerial Decree² in February 2000, describes the policy up to 2005. The legal base of this policy plan is the National Nature Conservation Ordinance of (PB 1998, no 41), which implements several biological diversity related treaties for the Netherlands Antilles. These are the Convention on Biological Diversity (CBD), the Convention on Migratory Species (CMS), the Wetlands Convention (Ramsar), the Convention on International Trade in Endangered Species (CITES), the Inter-American Sea Turtle Convention and the Protocol on Spe-

¹ "Natuurbeleid van de Nederlandse Antillen – aan de dageraad van een nieuw millennium". Environmental Section, Dept. of Public Health and Environmental Hygiene. Willemstad, February 2000.

² Ministerial Decree, February 1, 2000, No. 538/JAZ.

cially Protected Areas and Wildlife (SPAW) of the Convention for the Protection and Development of the Marine Environment of the Wider Caribbean (Cartagena Convention).

The National Nature Policy Plan describes the instruments to safe-guard biological diversity. Aside from legal protection of areas and species, these include in particular management models based on the realistic acknowledgement of the fact that humans play a role in the development of nature. For large parts of nature it is impossible to shut out all human influences. And of course humankind is part of nature, and cannot survive without nature. What is needed then is to make sure that all elements of nature can function optimally, without separating out any element. This approach is called the ecosystem approach.

To attain this kind of nature conservation management a number of preconditions need to be met. There is a need for a thorough understanding of the prevailing natural processes, both in those directly involved in the management of an area, and in the rest of the population. Specific nature research and providing information to the general public in order to mobilize them for nature conservation are essential.

Actual nature conservation management is mostly the responsibility of the island territories. The central government has to see to it that the requirements of the various treaties are met. This task of implementing the treaties is partly delegated to the island territories by way of the National Nature Conservation Ordinance. Aside from a few issues that directly involve the central government, the central government mainly provides the policy framework, and supports the islands in the implementation of their task by providing guidelines, assistance, research coordination, and development of tools and methods. In analogy to the national nature policy plans, the islands are required to make their own nature policy plans, which will subsequently form part of the national policy.

Promote islands' compliance with National Nature Conservation Ordinance

Regretfully none of the islands has yet complied fully with the National Nature Conservation Ordinance which requires each island not only to formulate an island nature policy plan, but also an island nature ordinance implementing legislation that is required by the various treaties. Efforts to have the islands meet their obligations will continue.

A new five-year National Nature Policy Plan will run in conjunction with this policy plan before you, and sets out the activities planned for the coming period and the necessary means.

These activities and instruments are focused on several issues. For protected areas, the different categories are described and the procedures to designate national parks. Alternative strategies for the pro-

Implementation of National
Nature Policy Plan:
Eco-system approach research
and pilot models
Maintenance of biodiversity
database and 'red lists' of endangered species
Invasive species threat mitigation
Elaboration of guidelines for
access to genetic resources
Increase public awareness of

the need for conservation

tection of areas, like the eco-system approach, are brought forward. To better manage the protection of species a publicly accessible database of all species from the islands will be set up. Among other things this database will help in the compilation of national and island "red lists" of threatened species, an important tool for policy development and legislation. Specific attention is given to the threat of invasive species. On a different note, guidelines for providing genetic resources will be compiled. Special attention is given to increasing public awareness of the need for conservation.

Most of the activities are in the process of implementation and will be further elaborated in the coming years. Every five years the national nature policy plan will be updated.

3.4.2 Netherlands Antilles Coral Reef Initiative (NACRI)



Highly developed reefs are found both in Curação (above) and Bonaire, drawing many dive tourists to the islands.

Coral reefs are of immense importance to the Netherlands Antilles. Not only for the fishery, as protective barriers against the sea, or as rich depositories of biodiversity, but also for tourism. Tourism is the economic mainstay of all the islands and coral reefs are one of the most important attractions bringing tourism to the islands. Coral reefs that have been shown to be among the best of the Caribbean, notwithstanding the general deterioration of coral reefs in the islands, as is happening worldwide. Precisely because of this general deterioration of coral reefs, mainly due to human impacts, but exacerbated

by global climate change, they require special attention. This has been recognized by the islands that all have, or are in the process of establishing, marine protected areas (MPAs). The central government also has a particular concern for the coral reefs and, as reefs are an international concern, and need protection on an international scale because of their susceptibility to transboundary influences, has joined the International coral Reef Initiative (ICRI). At the same time it has stimulated increased cooperation between the islands in the protection of coral reefs.

The Netherlands Antilles Coral Reef Initiative (NACRI) was established by the Nature Forum in 2000 as part of a concerted effort to improve nature conservation and management in the Netherlands

Antilles, and specifically targeting coral reefs in order to give more attention to and better coordinate protection of the coral reefs of the islands. It brings together a broad range of organizations and groups: the MPA management organizations of the islands, island government agencies involved with nature conservation, reef researchers, non-governmental pressure groups concerned about coral reefs, but also businesses that exist by grace of the coral reefs and their sector organizations and fishermen, in short, all stakeholders. By general consent this initiative is coordinated by MINA.

Several NACRI meetings have now been organized, funded by external donors. A number of activities were identified at these meetings and one in particular was implemented by MINA. This has led to the establishment of a Netherlands Antilles Coral Reef Monitoring Node within the Global Coral Reef Monitoring Network (GCRMN, one of the ICRI operational networks), coordinated by MINA. As part of this project a central database for Antillean monitoring results was established. A NACRI communication network was also established over the past years, and now includes coral reef experts from neighboring countries and islands, particularly the French islands and Venezuela, as well as St. Lucia, Antigua, Jamaica, and the USA.

To ensure the continuity and effectiveness of the NACRI, MINA will continue to coordinate and support this important national coral reef initiative. In the coming period regular NACRI meetings will continue to be organized to bring the coral reef stakeholders of all the islands together to coordinate and catalyze action. Coral reef monitoring activities on the islands, including the Saba Bank, will be coordinated and stimulated. The central web-based databank for monitoring data will be maintained. Other projects formulated by the NACRI will be supported and where possible implemented.

3.4.3 Sustainable Management of the Saba Bank

The national Nature Policy Plan also discusses the Saba Bank. The Saba Bank is the only part of the Netherlands Antilles which does not fall under the jurisdiction of one of the islands; extending as it does beyond the territorial waters of Saba, with most of it in the Economic Fishery Zone of the Netherlands Antilles, it falls under the direct responsibility of the Central Government. It is a large shallow bank, larger in area than all the islands put together, and of vital importance to Saban fisheries. There is every rea-

Continued coordination of Coral Reef Monitoring

Maintenance of central database for monitoring data

Maintenance of NACRI communication network

Continued coordination of NA-CRI Organization of NACRI meetings



Lobsters are still plentiful on the Saba Bank. Sustainable management of the bank is necessary to ensure they remain so.

son to suspect that it is very rich in biodiversity, and there are indications there could be oil reserves located underneath it. As such an important natural resource, the Bank has the special attention of the Central Government of the Netherlands Antilles. `

In order to wisely use the natural resources of the Bank, while protecting both the fisheries and its biodiversity, the bank will be established as a special marine management area with a sustainable integrated management plan based on an ecosystem approach formulated in close coordination with the island of Saba. Such a management plan will allow use of the resources of the Bank while ensuring that the use is sustainable.

Saba Bank Special Marine Management Area

Biodiversity Survey of Saba Bank

Saba Bank PSSA designation by IMO

In order to realize an integrated sustainable management plan, a thorough survey of the Bank is necessary. As a first step a survey of the fisheries on the Bank was completed in the past planning period. In the coming period the biodiversity of the bank will be surveyed and mapped, and sensitive areas identified. Monitoring of the fisheries will be continued.

Because the Saba Bank is close to St. Eustatius, many tankers en route to or from the Statia Oil Terminal pass over the Bank, posing a hazard to fisheries, and often anchor there as well, causing damage to the bottom flora and fauna. In order to sustainably manage the Saba Bank, designation as a Particularly Sensitive Sea Area (PSSA) by the International Maritime Organization (IMO) will be sought for the Saba Bank. This will allow for no-anchoring areas and areas to be avoided in the most sensitive parts of the Saba Bank.

3.4.4 Sustainable Fisheries

Fishery is a perfect example of an economic activity which is completely dependent of natural resources. Not only to protect biodiversity, but also to protect the fishery itself, it is of the utmost importance that sustainability is the goal. Development of fishery must be a carefully considered process and must only advance when there is no doubt that stocks will continue to increase until the optimum sustainable yield level is reached.

Fishery management is the competence of the Ministry of Economic Affairs, however, within the framework of sustainable economic development, and given the expertise built up during the fishery survey of the Saba Bank, it was agreed that MINA will participate in the development of national fishery policy, and will continue to be

Monitoring the Saba Bank Fishery. Dept. of Environment, Ministry of Public Health and Social Development. Willemstad, October 2000.

Fisheries survey Bonaire, St. Eustatius and St. Maarten

Assessments of critical fish stocks

Promote regulation of Antillean high seas fishing activities

closely involved with fishery management, particularly with respect to research and monitoring of the fishery in order to assure sustainability.

In preparation for the fishery policy formulation MINA is working on a quick scan of the fisheries on those islands where data are lacking, i.e. Bonaire, St. Maarten and St. Eustatius, and on further research of specific important fish stocks such as groupers. In the coming period these data are expected to be available and the formulation of fishery policy will be completed. In order to mitigate overfishing and speed up recovery of fish stocks, establishment of notake marine reserves will be promoted on islands where they are still lacking.

One of the concerns of the Netherlands Antilles recently has been the involvement of fishing vessels registered under Antillean Flag in IUU (Illegal, Unregulated, and Unreported) fishing. MINA will cooperate with the Directorate of Maritime Affairs, and the Ministry of Economic Affairs to draft adequate legislation to regulate fishing by Antillean vessels on the high seas, registration of fishing vessels, inspections, and catch data collection.

3.4.5 Sustainable Nature Conservation

The major problem of Antillean nature conservation at this moment is the lack of sufficient money to safeguard adequate management of protected areas, which is in the hands of non-governmental organizations. The nature conservation management organizations on each of the islands have an official legal mandate of the respective island governments to manage the legally established nature areas. Because of the deplorable financial situation in the Netherlands Antilles, the cutbacks in the public sector, the instability of protected area revenues, and the limited means to generate such revenues, stable management is very hard to realize at present. The island governments provide some support for the efforts of the nature conservation management organizations where possible, but are unable to provide adequate financial support. Revenues are mainly generated from diver fees (marine protected areas) and entrance fees (a number of terrestrial parks). Sometimes there are project grants from institutional donors but these generally exclude structural costs. The total income fluctuates widely from year to year due to changes in numbers of visitors, varying and unpredictable funding support, etc.

The problem of the inadequate financial basis for the management of protected areas in the Netherlands Antilles has been the focus of attention for some time now. MINA was mandated by the various nature conservation management organizations to take all necessary actions leading to sustainable finance of managing protected areas.

Trust Fund study completion

Seek, coordinate, and administer sustainable financing for nature conservation management

Establish CINA Foundation

Assist in establishment of CINA secretariat

A report "Budget and Financing Plan for the management costs of the main nature areas in the Netherlands Antilles" was produced and formed the basis for terms of reference for a study on a trust fund for nature management, with the central question being specifically the conditions under which private donors would be prepared to make a structural contribution to nature conservation. The study, which will be completed in 2004, addresses not only the possibilities of raising money but also the technical and organizational aspects of the management and disbursement of such funds.

The nature conservation management organizations recently formalized their cooperation through the establishment of a foundation. The name of this foundation will be Dutch Caribbean Nature Alliance (DCNA). The nature management organizations have mandated the central responsibility in the short term to MINA to continue to explore all possibilities in order to achieve sustainable financing for nature conservation management, to take all necessary measures, and to coordinate all actions, in particular to proceed with the legal establishment of the foundation and communicate and coordinate all actions in case subsidy will be granted. In the medium long term a "secretariat" for the foundation will be established, which will take over all activities.

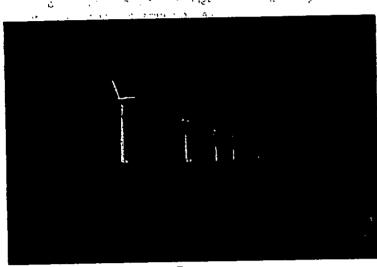
3.4	OUTPUT INDICATORS:	2007	2005	2006	2007	EFFECT INDICATORS:
3.4.1	At least two additional effectively managed protected areas ¹ ;					Improved protection of biodiversity (larger area of valuable biodiversity receiving protection)
	At least 2 more Ramsar areas ¹ ;					Improved protection of biodiversity (larger area of valuable biodiversity receiving protection)
	Structured bilateral cooperation with neighboring countries on conservation of shared species populations and special areas 1.			į		Improved protection of biodiversity (protection not only within the borders but also across the borders)
	Publicly accessible biodiversity database;	1				additional policy instrument; increased awareness
	Policy plans and up to date nature ordinances on all islands ¹		B, C, SXM		SXE	additional policy instruments
	National and island red lists of endangered flora and fauna;			✓		additional policy instruments
	Alternative conservation management models.		1			additional policy instruments; increased awareness

As this falls under the competence of the islands, MINA can only facilitate and stimulate and cannot guarantee that the minimum goals are in fact achieved.

3.4.2	regular NACRI meetings;	1	1	1	1	increased cooperation and exchange between organizations and islands to				
	examples of cooperation		<u> </u>	<u> </u>	<u> </u>	protect coral reefs of the islands;				
•	coral reefs monitoring on all islands ¹	V	1	✓	√	at least 3 joint projects implemented; Yearly report on the state of the coral				
	central monitoring database established	<u>√</u>	,			reefs of the Netherlands Antilles Improved policy instruments				
3.4.3	Preliminary map of Saba Bank biodiversity	✓				Improved policy instruments				
	PSSA proposal to IMO	1	1.75	2 }	1.181	Improved protection of biodiversity				
į	Saba Bank established as Marine Management Zone;	V	14-10 11 1	1.5.		Improved protection of biodiversity				
	Final biodiversity map of the Saba Bank;		3	✓		Improved protection of biodiversity				
	integrated sustainable management plan for the Saba Bank;				1	Lobster catches remain stable				
3.4.4	State of the fisheries report	✓		✓		2 new no-take marine reserves in Bon- aire and Curação resp.				
	National Fishery Policy Plan;			1		Measures to guarantee sustainability in the Fishery Policy Plan:				
	High Seas Fishery Ordinance proposal		✓		-	Less I.U.U. fishing by Antillean registered vessels				
3.4.5	legally established DCNA foundation;	V				establishment of Trust Fund or other				
	report of the trust fund study		<u></u>	 -		sustainable source of funding for na- ture conservation management				
ASSUMPTIONS			usks							
threats to biodiversity can be mitigated through proper management		no lo	low to medium risk: external factors, like climate change, can negatively influence biodiversity, but synergistic effects with local origin can be managed and greatly reduce the threats;							
All islands will comply with Nature Conservation Ordi- nance			w risk:	lack of	preser	nt compliance is more a matter of priority than not agreeing on principle;				
ufficien	t funding will eventually be available		Low to medium risk: there are many potential donors							

¹ This activity depends on volunteer input for the marine parks; MINA can facilitate, support and coordinate, but cannot force the volunteers to monitor

3.5 Sustainable Energy



Windmills at Playa Kanoa, Curação.

An important part of sustainable development is sustainable energy. Considering the rapid developments in this area and the wish in several islands to provide in their energy needs in a more sustainable manner, the Central Government too needs to give more attention in its policy to promoting sustainable energy. This is even given important understandable-tendency of energy producers and users to travel the traditional, non-sustainable path to provide for (rapidly) increasing demands. In looking out for the environment it is

only natural that MINA should consider it her responsibility to formulate a sustainable energy policy.

To develop such a sustainable energy policy it is first necessary to determine the present situation, and from that formulate a three-pronged policy based on:

- Energy conservation promoting reduction of energy use (including water-use reduction)
- Production upgrading making environmentally unfriendly production methods cleaner and reducing their share in the production process
- Promotion of renewable energy sources like sun, wind, and sea.

More efficient use of energy is the first step required for a sustainable energy policy. It can reduce the present use of finite energy sources (fuel). Since energy and water production are coupled in our islands, and water production is an energy wasting process, it is also necessary to promote water conservation. Promoting water and energy conservation, aside from being a technical challenge, is mostly a process of increasing awareness. The Central Government will support and/or start up this process to increase awareness on all islands. Right now St. Maarten is having such difficulty in complying with energy demand that reduction of use through energy saving is a first priority of the island.

Globally, the call to reduce emission of greenhouse gases responsible for global warming and the associated climate changes is getting stronger and stronger. This means that existing energy production methods must be improved in order to reduce the use of fossil fuels. Not only would this meet the requirements of the International

Promote water and energy conservation

Convention on Climate Change, it would also be beneficial to the economy because it would lead to a reduction of the use of expensive imported fossil fuel and a shift towards use of locally available, free energy sources. Of course these free energy sources would require substantive initial investments, and possible hidden costs to the environment must be carefully considered (e.g. potential harmful effects on biodiversity, thermal pollution, nutrient pollution and scenic impacts).

Locally, developments have not stood still. Not long ago a second, modern wind park went into production on Curaçao, reaffirming and strengthening the island's leading position in the region in the area of sustainable energy production. Saba has been exploring the possibilities to realize a more sustainable energy production. A proposal for three wind turbines was considered for a time.

Promote use of renewable energy sources

Bonaire started work on a broad survey of the potential for utilization of renewable energy sources to determine the most appropriate way of implementing sustainable energy production. Sustainable energy production fits in with Bonaire's conservation image, and the island can expect it to greatly benefit both its economy and balance of payments in the long term. In the coming period such initiatives will be encouraged, facilitated, and supported where possible.

The theme energy (conservation) is closely linked to other departments, in particular the Ministry of Economic Affairs, so it is only logical to closely involve this department in the development of a policy to promote a more sustainable approach to energy supply.

An organization specifically established to promote and study the use of renewable energy sources and energy conservation is the Antillean Foundation for Energy (FAPE), which has built up great experience in the field, and is recognized as one of the region's leading experts on sustainable energy matters. MINA supports the goals of FAPE as an independent non-profit organization, and will make use of FAPE's expertise in developing a sustainable energy policy.

Other stakeholders to be involved in the policy development include the University of the Netherlands Antilles (technical faculty), the energy production companies and other organizations that are specifically involved in this subject.

A comprehensive survey of the present energy situation will be completed in 2004 providing the following elements: a total energy balance at the present time; an overview of the renewable energy sources potentially available to each island; an overview of "mature" technologies available to harness such renewable energy sources; an indication of the extent to which the said sources can be utilized, including where possible a realistic time frame for the actualization;

Continued support for FAPE

Inventory of present energy situation

and an estimate of how much fossil fuel savings could potentially be realized.

Continued networking and organization of workshops on renewable energy use The survey will not only provide the necessary data but will also serve to establish a network of organizations, companies, NGO's and government services involved in energy production or policy. This network will be built up carefully in the coming period with the organization of appropriate workshops/symposia around energy conservation and renewable energy source issues to stimulate and enhance communication. In this planning period the network will play an important role in the process of policy formulation.

Determine national Carbon Balance

In anticipation of the ratification by the Netherlands Antilles of the Climate Convention it will be important to determine the carbon balance for the Netherlands Antilles.

Develop sustainable energy policy

Once all the data about the present energy situation have become available, there will be a much better basis for future prognoses and to determine potential policy goals. This will again require the involvement of the network that has been built up.

3.5	OUTPUT INDICATORS:	2004	2005	2006	2007	EFFECT INDICATORS:			
	Report on energy situation in the Netherlands Antilles;	~				Decreased energy/water use per household ¹			
	sustainable energy workshops;	2	2			Increased awareness ¹ (at least 100 people per year reached, subsequent coverage in newspapers, reactivation/reinforcement of existing initiatives)			
	draft sustainable energy policy;				1	Percentage renewable sources in total energy production ¹ ;			
	established network of sustainable energy;		<u> </u>			At least 15 participants in network.			
	Promote energy saving and use of re- newable energy sources		1	1	1	At least 3 best practice cases for energy saving and renewable energy source use			
	Analysis of carbon balance		· [1	Improved policy instruments			
AS:	SUMPTIONS		1-	RISK					
FAF	FAPE continues to be active			from Aq		FAPE now also receives financial support alectra the energy and water production on Curação.			
The sector cooperates with the inventory and attends the workshops			- 11	Low risk, energy producers on all islands have expressed their interest in producing energy more sutainably					

¹ Baseline indicators must be established by 'National Exploration of the State of the Environment', after which target values can be formulated.

4 Education and Public Awareness

Where in the past Environmental Awareness and Education was mostly seen as a back-up activity for the other themes of nature and environment policy, the awareness has grown that environmental and nature conservation awareness and public education are in itself policy goals; this in a modern society where governments find themselves shifting the emphasis from initiation to incentivation of policies, programs and projects. Another important emphasis rests on regulation, and monitoring. This implies that civil society will have to take more of a lead in environmental policy often with governments being one of the strategic partners.

4.1 Strategic partnerships

All this cannot be achieved without a strong environmental and nature conservation awareness base within civil society and its organizations and institutions. Of course there are scores of other areas and social issues that vie for societal attention. What is needed is a general vision and approach that will convince social decision-makers as well as the public in general, that nature-related and environmental issues are as important to society's well-being as are poverty eradication and creating jobs. This is done by promoting and introducing the general vision and concepts of sustainable development, whereby the sustainability of both human/social and natural/environmental resources are presented as essential conditions for further social and economic development. This is only feasible in cooperation with other important agents both within and outside of government.

Therefore one important goal of governmental policy on nature and environmental public awareness and education; should be the establishment of partnerships for nature, the environment; and sustainable development. The strategic partners that must be reached are subdivided into eight sectors: government; environmental and nature conservation NGO's; the education sector; the media; the tourism sector; other economic sectors; social, cultural and recreational organizations, and neighborhood organizations. Each of these sectors needs a different approach.

The following actions are anticipated in this planning period:

- Extension and formalization of networks and partnerships encompassing the strategic area's mentioned above
- Production and distribution of locally adapted informative and educational media as well as fostering such activities by civil society.

Build or extend partnerships

Produce, distribute, and promote information materials

Foster and develop public awareness and education programs

Identification, formulation and implementation of integrated public awareness and education programs on both an island for island and inter-island level.

The specific objectives of these actions are:

To promote awareness of the relationship between conservation of human/social resources and natural/environmental resources, as essential condition for sustained social, cultural and economic development;

To promote the knowledge of local ecosystems, and natural, urban, and mixed landscapes in a historic perspective;

To promote awareness of local environmental and nature legislation and policies, as well as of international treaties and obligations, and their consequences for human, social and economic behavior;

To promote awareness of the challenge pollution, waste and waste water problems pose for a Small Island Developing State and possible solutions, as well as implementation of these solutions;

To increase awareness of the importance of conservation and sustainable management of natural and environmental resources for sustainable tourism developments;

To increase awareness of the importance of sustainable energy use and production of 'clean' energy, as well as the relationship between these issues and world-wide climate change and sea-level rise;

4.2 Fostering Civil Society activities

The initiatives to care for the environment and protect and preserve natural resources cannot only come from the government. The rest of society—NGO's, the private sector— must also be actively involved in the efforts to create a greater sense of ownership with respect to environment and nature. To promote and stimulate such an active society, two financial instruments have been established. These are the KNAP Fund (Fund for Small Nature Projects Netherlands Antilles), and the MINA Fund (Environmental Fund Netherlands Antilles). A third financial instrument to promote civil activity is the Green Investment Scheme.

KNAP Fund

The KNAP fund is a joint initiative of the Ministry of Public Health and Social Development of the Netherlands Antilles (VSO), the Dutch Ministry of Government Reform and Kingdom Relations (BVK), and the Dutch Ministry of Agriculture and Nature Conservation (LNV) established in 1995. Its objective is to stimulate nature conservation projects against the tendency to ignore nature conservation because of more immediately pressing needs (such as poverty



Villagers planting trees in the village of Lagun, Curação, a KNAP Fund project.

Continued management of the KNAP Fund alleviation), in order to better protect biodiversity and simultaneously increase community involvement with nature conservation issues.

To do this, the Fund supports small projects or initiatives from local NGO's or private sector organizations by providing small grants. Funding is provided mainly by BVK (as part of the cooperative funding) and by LNV, with a small part also coming from VSO. MINA coordinates the Fund, with project proposals being evaluated jointly by MINA and LNV.

Project proposals can be in the area of public awareness or education, conservation management, re-

search/monitoring, or publications. Especially projects that can serve as an example to stimulate activities elsewhere in the islands, or projects that pave the way for larger projects financed by other sources are sought.

In the past the maximum grant per project was set at NAf 15,000, however, over the past few years it has become clear that this does not suffice to fill the existing needs, and is in fact a limiting factor. There is a great need for larger projects that exceeds the present means of the KNAP Fund. Because of the financial restrictions projects are often not sent in, and other sources for additional funding are very limited. This can discourage the motivation and creativity of NGO's causing them to forego activities.

It is clear that the available funding must be increased if the objectives of the KNAP fund are to be realized in a meaningful way, and a structural increase in funding of the KNAP fund will be sought in order to raise the grant limit to around NAf 50,000 (which is still a small grant in internationally accepted usage).

MINA Fund

Similar to the KNAP Fund above, the MINA Fund was established (in 1996) for projects in the area of environmental care and sustainability. The Fund is a joint initiative of VSO with the Dutch Ministry of Housing, Planning, and Environment (VROM), and BVK with the bulk of the funding coming from BVK and VROM. Analogous to the KNAP Fund, its objective is to stimulate environmental projects against the tendency to ignore the environment because of more immediately pressing concerns, in order to better protect the environment and simultaneously increase community involvement with

Continued management of MINA Fund



Youth at work during the clean-up of a derelict nature area, a MINA fund project.

environmental issues. In order to do so the Fund supports initiatives from NGO's and the private sector. It is also coordinated by MINA, and project proposals are evaluated jointly by MINA and VROM.

Project proposals that have to do with prevention or recycling of waste or wastewater, with sustainable tourism, renewable energy, or with public awareness and educations, will have preference, particularly projects that can serve as an example to stimulate activities elsewhere in the islands, or projects that pave the way for larger projects financed by other

sources.

The maximum grant size for the MINA Fund was originally set at NAf 20,000 when the Fund was established in 1996. For the same reason as set out above for the KNAP Fund, this is no longer considered sufficient, and similarly a structural increase in funding is sought in order to raise the maximum grant size to NAf 50,000.

Green Investment Regulation

A third instrument to stimulate environmentally beneficial or nature conservation activities, particularly from the private sector but also from NGO's, is Dutch tax legislation called "Green Projects (Netherlands Antilles and Aruba) Regulations"1 which is an extension of the Dutch Green Projects Regulation which sets criteria for so-called 'green projects' under the Dutch Income Tax Act. Although this is a wholly Dutch regulation, it offers environmentally friendly projects a way to realize low interest financing from Dutch "Green Funds" maintained by several banks in the Netherlands. In order to be eligible for such "green funding" a "green certificate" from the Dutch VROM Ministry is needed. The application for green certification is handled by the particular "Green Fund" that is interested in financing the project. In the decision procedure for the certification MINA has an advisory role in order to assure that the project in question sufficiently meshes with established environment and nature conservation policy in the Netherlands Antilles.

Provide advice to VROM on 'green projects'

¹ Government Gazette, The Netherlands, 1 May 1998

4	OUTPUT INDICATORS:	2004	2005	2006	2007	EFFECT INDICATORS:					
4.1	Formation of a National Sustainable Development Council	1	1	1	1	At least 6 meetings of National council					
	Strategic partnerships established	1	1	1	1	meetings of strategic partnerships					
	Information folders/brochures pro- duced	2000	3000	2500	3000	Number of brochures/books distributed					
	Educational/informative publications	1	1	1	1						
	Information for the media	10	20	15	20	Number of newspaper articles featuring sustainability, nature conservation, sustainable tourism/energy, etc.					
	island- en neighborhood based awareness and educational pro- grams	20	50	20	10	Number of schools/neighborhood or- ganizations provided with educational materials/programs					
	Website	✓	*	✓	1	Number of website visitors remains at least stable					
	Electronic newsletter	3	3	3	3						
4.2	At least 5 projects funded yearly by the KNAP or MINA Fund respec- tively	*	✓	✓	✓	At least 15 projects applying for funding yearly for one of the funds					
4	ASSUMPTIONS		RISKS								
4.1	Sufficient political support for Sustain Development Council	inable	Low. Since the Netherlands Antilles is an official participant in the SIDS meetings, there is broad support to address the topic of Sustainable Development more								
	Sufficient interest in the various sector form partnerships	ors to	Low. Most sectors are interested in the subject and would welcome the chance to become involved in these matters								
	Sufficient interest of the media		Low. The media are generally very willing to publish material pertaining to environment and nature conservation								
	Sufficient interest of schools		Low. Schools are generally short of material or programs adapted to the local situation and welcome such programs								
4.2	Sufficient community support to sustain vironmental organizations	n en-	Low. Ir	all isla	inds the	re is a long history of conservation					
	Continued funding from the major donor	73	groups sustained by the local community Medium. BVK has indicated that it will continue to fund the KNAP and MINA Fund as long there is some input from the respective Dutch ministries of LNV and VROM. Both these ministries still support the fund.								

5 Legislation, Standardization and Enforcement

Through National Legislation of February 9, 1998, a new paragraph was added to the Island Regulation of the Netherlands Antilles (Eilandenregeling Nederlandse Antiller, ERNA). In article 2, paragraph e, section 10 of the Island Regulation of the Netherlands Antilles (ERNA. 1998), the central government's environmental task now reads as: "the management of the environment and the management and conservation of nature, as they derive from treaties."

Based on this amendment of the relationship between island governments and central government, the National Environment Ordinance (Landsverordening Grondslagen Milieubeheer) and the National Nature Conservation Ordinance (Landsverordening Grondslagen Natuurbeheer) were drafted.

National Environment Ordinance:

To adequately deal with the management of the environment in the Netherlands Antilles, it is necessary to establish the framework within which activities impacting the environment are acceptable. Basic premise is that adequate environmental management and policy can only be possible as the result of a joint sense of responsibility of the central and the island governments. This means that policy as well as policy implementation should have broad administrative support.

Based on the Nasqual Environment Ordinance the central government's taskis to draw up a national environmental policy plan and to develop environmental standards to implement obligations; resulting from conventions and other international agreements and to establish and invironmental Inspectorate—

The National Environment Ordinance also implements several Co ventions to which the Netherlands Antilles is paray or which it is tending to ratify. These are

The Convention for the Projection and Development of the Marine Environment of the Wider Caribbean Region (the Cartagera Convention, Trb. (1988, 152), which aims to protect and develop the marine environment of the Wider Caribbean Region, the Convention is a tramework, within which specified protocols are developed for an effective implementation.

The Protocol concerning cooperations in compating oil spillsting the Wider-Caribbean Region (Oil Spill Protocol), which is the first protocol to the Caribgena Convention.

Draft National Environmental Policy Plan

- The Protocol on Land-Based Sources of Marine Pollution, (LBS Protocol), the third protocol of the Cartagena Convention, aims to prevent, reduce and control pollution of the marine environment by land-based sources and activities;
- The Basel Convention (Trb. 1990,12), which aims to reduce and control the transboundary movement and disposal of hazardous waste;
- The Rotterdam Convention (Trb. 1999, 30), which regulates international trade of hazardous substances, more specifically the exchange of information between exporting and importing countries, a "prior informed consent" procedure (PIC);
- The Convention to protect the Ozone Layer (Trb. 1985, 144; 1988, 145), a framework convention to protect the ozone layer;
- The Montreal Protocol (Trb. 1988, 11; 1989, 11; 1990, 99; 1991, 49), is a protocol under the Ozone Convention above, intended to reduce the release and the production of substances that damage the ozone layer, such as Chloro-Fluoro-Carbon gases or CFC's
- The United Nations Framework Convention on Climate Change (Trb. 1992, 189; 1994, 187; 1996, 85). This Convention strives for measures to reduce climate change, i.e. to reduce greenhouse gases such as carbon dioxide or CO2.

Maritime Conventions, such as the London Convention 1972 (Trb. 1973, 172) and OPRC Convention (Trb. 1992, 1), and agreements under the IMO such as the International Convention for the Prevention of Pollution from Ships (Marpol) are not included in this Framework Ordinance, because these Conventions are considered as maritime conventions with an environmental aspect, and are therefore implemented by maritime ordinances, respectively the National Oil Tanker Damage Ordinance, the National Oil Tanker Liability Ordinance, and the National Ordinance to Prevent Pollution from Ships.

The National Environment Ordinance is ready for approval by the legislature.

In 2004 a start will be made with the careful formulation of envi-

ronmental standards. National environmental standards should be considered minimum standards, a departure from them is only allowed towards stricter measures. Starting points in developing standards for the Netherlands Antilles are "best available tech-

niques", and the scale of the environmental problem—global, regional or local. A link will be made with relevant international, European, Dutch, American or regional standards. Initially the priorities as set out in this NEP Plan will be dealt with.

nique

Continued development of environmental standards and

regulations

Promote drafting of island environmental policy plans and ordinances As a result of the National Environment Ordinance island governments should each establish three island ordinances, in case they have not already done so: an environmental or nuisance ordinance, a waste management ordinance and a waste water ordinance. The island governments should also formulate an island environmental policy plan.

Promote better enforcement of environmental legislation

Enforcement of existing environmental legislation, i.e. the nuisance ordinance and the waste management ordinance, has lagged behind. The coming period the island governments will be stimulated to enforce environmental legislation as a structured whole. Only then will governments be able to eliminate the backlog.

The National Nature Conservation Ordinance

This National framework law was established in 1999 and subsequently amended in 2001. This ordinance regulates the protection of flora and fauna, the conservation of biodiversity and the management and conservation of habitats and ecosystems.

The National Nature Conservation Ordinance also implements the following Conventions:

- The Convention on Biological Diversity (CBD, or Biodiversity Convention), with its objective of conservation of biodiversity, sustainable use thereof, and a fair and equitable sharing of the expertise and benefits coming from the use of genetic resources. It seeks furthermore to ensure access to genetic resources and the exchange of relevant technology. In addition this Convention has an important financial instrument for its implementation, which is the Global Environmental Facility.
- The Convention on International Trade of Endangered Species (CITES), Washington, United States, March 3, 1973 (Trb. 1975, 23). This Convention regulates the trade of species which are listed in its three appendices, using a strict system of permits as instrument.
- The Convention on Migratory Species, (CMS or Bonn Convention). Parties to this convention have agreed to protect endangered migrating species which are listed in its Appendix I. Regional Agreements should be established for species listed on Appendix II.
- The Ramsar Convention on Wetlands of International Importance (Ramsar Convention), seeking the protection of wetland areas of international importance, which are listed under the Convention. Ramsar areas can also be coral reef areas.
- The Specially Protected Areas and Wildlife (SPAW) Protocol of the Cartagena Convention, which regulates several regional na-

ture management issues, such as the obligation to protect nature areas in the marine and coastal area and the protection of species.

 The Inter-American Convention for the Protection and conservation of Sea-Turtles (IAC) which strives for the protection, management and recovery of the populations of all sea-turtle species present in the surrounding waters of the American Continent.

The National Nature Conservation Ordinance requires the central government to draft a national nature policy plan every five years. The first such National Nature Policy Plan started in 2000 and runs till 2005. Every five years the islands are also required to draft their own island nature policy plan (with a first deadline of February 1, 2001). In addition each island should have its own nature ordinance in place before February 2001. At this writing only Bonaire has complied with the first requirement, its own nature policy plan (2002). So far, St. Maarten is the only island with an island nature ordinance (2003) that conforms to the National Nature Conservation Ordinance. All other islands do have some sort of nature ordinance(s) but either incomplete (e.g. only addressing marine conservation) or not conforming to all the requirements of the National Ordinance. The central government will keep stimulating island governments to fulfill their obligations.

Promote island's compliance with national nature conservation ordinance

5	OUTPUT-INDICATOR	2004	2005	2006	2007	EFFECT INDICATORS:
	Standards for waste water, emissions, oil production and transshipment, and waste management		1			Additional policy instruments; basis for legislation
	Regulations incorporating the standards			✓		Additional policy instruments
	Inspectorate of Nature and Environment				✓	Enforcement of standards
ASS	GUMPTIONS		RI	SKS		
	staff addition to MINA by way of Dutch technical assistance proceeds as planned		as	uital	ole e	ection of applicants has been made and expert has been found and is expected to une 2004.
	Inspectorate of Public Health will incorporate the Nature & Environment Inspectorate					greement was reached on this with the th Inspectorate

6 Cooperation

As a group of small islands sustainable development cannot be achieved without cooperation, whether it be internally, between the islands, or externally, within the region, within the Kingdom of the Netherlands, or globally. On the one hand, the small scale of the islands translates into a lack of capacity and/or funding that can only be addressed by cooperation. On the other hand, environmental problems are typically not bound by borders and cooperation is essential to address them adequately. In addition environmental and nature conservation policy should be optimally integrated with related policy fields.

Consequently MINA will continue to work closely together with the various other departments and directorates within the Netherlands Antilles government, as well as with the relevant island departments. To ensure good communications with the islands, MINA has established focal points on each of them. Each island has one governmental focal point, appointed by the island government, and oney NGO focal point representing either the nature conservation management organization of the island or, if present, a forum of nature conservation and environmental NGO's on the island. The Netherlands Antilles Nature Conservation Initiative network (NANCIweb) further broadens the communication channels to include representatives of all nature conservation NGO's as well as the relevant island departments. MINA will continue to maintain and foster this, system of close cooperation and communication.

To ensure that nature conservation policy is sound and can be successfully implemented; supporting, scientific research is essential. The Netherlands Antilles have a long-established biological research institute, the Caribbean Research and Management of Biodiversity. Institute or CARMABI, which is the obvious source for scientific data necessary for nature conservation policy making and implementation. MINA has commissioned work to CARMABI in the past and will continue this cooperation in the future. As natural partners MINA will seek continued support for CARMABI, but subject to clear conditions and directive guidelines, in order to ensure a close correlation between policy development and research.

At the Kingdom level MINA has a cooperative agreement with the Dutch Ministry of Agriculture, Nature and Food Quality (LNV) since 1996. Through this agreement MINA receives technical support when necessary. LNV also participates in the KNAP Fund and sits on the project evaluation committee. A similar cooperative agreement was entered into with the Dutch Ministry of Public Housing, Planning, and Environment (VROM) in 1996. VROM is one of

Continued cooperation with stand local points

Maintain and foster the NANCI web communication network

Working relationship with CARMABI

Continued cooperation with LNV and VROM

Cooperation with the Dutch Ministry of V&W

the donors of the MINA Fund and sits on its project evaluation committee.

Under the WW2BW initiative (see below) the Netherlands Antilles in 2004 entered into a partnership with the Dutch Ministry of Transport, Public Works and Water Management (V&W), which will assist MINA in preparing a proposal to the IMO to establish the Saba Bank as a PSSA.

Regionally, the Cartagena Convention for the Protection and Development of the Marine Environment of the Wider Caribbean is the only multilateral environmental agreement. It is an instrument of the Caribbean Environment Program (CEP), one of the Regional Seas Programs of the United Nations Environment Program (UNEP). In 1984 the Netherlands Antilles was only the second country (after the USA on month earlier) to ratify the Cartagena Convention; ever since it has continued to take a leading role in this regional cooperative agreement. There are three protocols under the convention, which each address a specific area of environmental concern: the Oil Spill Protocol, the Specially Protected Areas and Wildlife (SPAW) Protocol, and the Land Based Sources of Marine Pollution (LBS) Protocol.

Continued participation in Oil Spill RAC/REMPEITC Steering Group

The Oil Spill Protocol specifically addresses oil spills and is intended to strengthen national and regional preparedness and response capacity of the nations and territories of the Caribbean in case of oil spills. The Regional Activity Center (RAC) for this Protocol is hosted by the Netherlands Antilles, though not through MINA but through the Directorate of Shipping and Maritime Affairs, which already housed the REMPEITC (Regional Marine Pollution Emergency Information and Training Center of the IMO), which serves as RAC. MINA is second vice-chair of the Steering Committee of the REMPEITC/RAC.

Continued active participation in the SPAW activities

As the main regional instrument for cooperation to protect biodiversity, the SPAW protocol has a special place in the international efforts of the national government of the Netherlands Antilles. As one of the first countries in the region to ratify the protocol, it has played and will continue to play a leading role in its implementation.

Continued active participation in the LBS Protocol

The LBS Protocol is not yet in force, this will happen when nine countries ratify it. It was signed in Aruba in 2000 after long negotiations in which the Netherlands Antilles played an active role. Once the National Environment Ordinance is passed the Netherlands Antilles is ready to ratify the protocol. The protocol has an Interim Scientific and Advisory Committee (ISTAC) and two RACs, one in Trinidad and one in Cuba. MINA is vice-president of the Steering Committee for the RACs.

Continued active participation in the IAC

In the coming years the Inter-American Sea Turtle Convention (IAC), which was ratified by the Netherlands Antilles in 2000 and came into force in 2001, will be further developed and the Netherlands Antilles will be involved. At the moment the IAC is in the process of establishing a Scientific Committee and a Consultative Committee. MINA will attend the meetings of these committees as well as the Conferences of Parties.

Promote nomination of Southern Caribbean Island Group as Was

At the World Heritage Marine Biodiversity Workshop in Hanoi in 2002, the Southern Caribbean Island Group—consisting of the islands Curaçao, and Bonaire, and the Venezuelan Aves archipelago and Los Roques archipelago—was recommended as a priority for a transboundary marine World Heritage Site (WHS). Subsequently, led by the National Commission for UNESCO, an initiative group was formed consisting of different agencies in both the Netherlands Antilles and Venezuela, and the Foreign Affairs Ministry of the Netherlands, together with several international non-governmental organizations and the World Heritage Centre of UNESCO, to realize the nomination and eventual designation of this area as a World Heritage site, which will emphasize the very high marine biological diversity of the area. MINA participates in this initiative group and will continue to support, stimulate and facilitate the nomination process where possible.

Continued participation in the ICRI

The Netherlands Antilles is a member of the International Coral Reef Initiative (ICRI), which is not a legal instrument, but a global partnership of governments, scientific institutions, and international organizations working together in order to protect the coral reefs in the world. ICRI's Call to Action and Framework for Action are endorsed by the Netherlands Antilles. On a national level island activities to protect coral reefs are supported and/or stimulated through the Netherlands Antilles Coral Reef Initiative (NACRI) (see above).

The White Water to Blue Water (WW2BW) initiative is a partnership initiative aimed at protecting the marine environment through integrated watershed management, first presented at the WSSD in Johannesburg in 2002 by the government of the USA and joined by a number of other countries, UN organizations and international NGO's (also including the Netherlands Antilles as a member of the CEP, and including the Netherlands as a donor). The initiative endeavors to support and promote partnerships for integrated watershed management in order to protect the marine environment. The Caribbean region has been chosen by the WW2BW initiative as the first area to be targeted.

The Netherlands Antilles is party to a number of other, global Biodiversity Conservation Treaties, i.e. the Convention on Migratory Species (CMS, or Bonn Convention), The Ramsar Convention, and the

Reporting to CMS and Ramsar

Continued implementation of CITES

Biodiversity Convention, as well as CITES. Under Ramsar it has designated a number of areas as protected wetlands, so far only in Bonaire; in the future the intention is to designate more wetland areas as Ramsar Site. In general the Netherlands Antilles does not attend the meetings of these conventions, unless they are held within the region, but is represented by the Dutch focal points of the Ministry of LNV. The obligations of CITES are implemented through MINA's role as CITES Management Authority.

Finally, the Netherlands Antilles is also party to a number of global treaties addressing various aspects of pollution, i.e. the Montreal Protocol or CFC protocol, The London Dumping Convention, and the Marine Pollution Protocol (Marpol).

ASSUMPTIONS MINA's resources remain at least at present level		Lo		Ther	re are no indications of either staff changes or backs.	
				CYC		
	CITES permits	✓	1	✓	1	Exact data on import and export of CITES species
	Participation in meetings	1	1	1	1	Viewpoints of Netherlands Antilles communicated in international fora
	SPAW, IAC, Ramsar, CITES, and ICRI reporting obligations met	•	✓	✓	✓	Areas and species protection in line with inter national requirements
6	OUTPUT INDICATORS:	2004	2005	2006	2002	EFFECT INDICATORS:

7 Funding

7.1 Introduction

The financial, human, and information resources necessary to realize the objectives of this policy plan are only available to a limited degree. With external financial support and great effort by many, a lot has already been accomplished. Such support has proven to be indispensable and for the planning period of this document will continue to be necessary.

Considering the estimated budget available for environmental activities as part of the national Sustainable Economic Development (SED) Program activities a strict selection of activities was made that is considered a pare-minimum to be able to execute activities add meet the objectives and set targets

The central government is in principle limited to activities that co form to the responsibilities seriout in the Island Regulations Nethe lands Antilles (ERIVA) te formulate nature conservation and any onmental policy based on the requirements of multilateral en onmental agreements of treaties, and inspect the compliance of the islands with stick policies. The Dutch development cooperation funding correspondingly limits it's funding to activities conforming t out in the ERNA Nevertheless, some of the environnental activities ser out in this policy plan intringe on the lasks assigned to the island poveriments. These activities are considered part of the central government's task to foster direct and geometrate sland efforts. Without such activities to stimulate policy implemenration policy would be nothing more than words on paper Alcase in points; the National Exploration of the State of the Universitient" described elsewhere in this policy plan. Although essential to identify gaps and priority attention areas, such an exploration necessarily consists of separate explorations on each of the islands and as such it is an island tasking eligible for funding from the National SED Programmeans

7.2 Central Government

Sustainable development, hence environmental care and nature conservation, have achieved a more prominent position in government policies over the past years. Both central and island governments each have their own responsibilities with respect to environmental and nature conservation amanagement and have duly allocated financial resources. The Netherlands Antilles has in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for in the past afforded the subject a modest position in its budget for its in the past afforded the subject as a modest position in the past afforded the subject and its past afforded to a level where they are insufficient expectation.

that there is still a lot of past neglect to overcome. The central government does have a well-functioning, though understaffed, department of environment and nature conservation, indicating a willingness on the part of the Antillean government to address this issue. Alas, the budget of the central government with respect to environment and nature conservation has not developed according to the prognosis in the original Contours of Environmental and Nature Conservation Policy. Acknowledging the general urgency to limit spending, the activities resulting from this policy plan are planned under the assumption that the available budget will not change significantly over the coming period.

A small part (\pm NAf 100,000 yearly) of the budget of the Directorate of Public Health is available as budget for environmental and nature conservation policy. In addition the Directorate of Public Health provides for the fixed expenses, management, salaries, and maintenance costs of MINA, a total yearly amount of \pm NAf 375,000. The total of central government funding for the coming four years is thus estimated to be NAf 1.9 million.

7.3 Dutch development cooperation funds

A major source of financial support will be the development cooperation funding of the Dutch Government, as part of the funding available for "sustainable economic development".

This consists of the share of the Central Government of the available Dutch development funding that has to be 'divided' among the nature & environment policy plan and the economic development program. The anticipated donor funds from The Netherlands Government supporting both programs of the Central Government are derived from:

- The total available funds for development cooperation (annual some 40 million euro) in the coming four years;
- A 50% share for sustainable economic development;
- A division over the Island Territories and the Central Government as proposed in the Wijers-report;
- For the Central Government this share is 10%, which equals an estimated total of NAf 18 million for the coming four years;
- It needs to be taken into account, that costs of projects (supported by development funds and not included in this program) that are already in execution will form a part of the determined donor budget; these projects in general already contribute to the policy targets and effects of the program, but however limit the budget for new activities and will make the setting of further priorities necessary.

The current estimates for the anticipated Dutch donor funds are 9 million NAFL for the environmental program and 12.7 million NAFL for the economic program. For the difference between the total amount (21.7 million) and the available budget (18 million), extra efforts will be undertaken to find other sources.

It was however found desirable to agree upon an a-priori division of the available 18 million of Dutch development funds over the two programs. After exclusion of the budgets for the SENTER and credit insurance incentives (where these arrangements go directly to the private sector), 57% of the remaining Dutch Development funds will become available for the economic program and 43% for the nature and environment plan.

7.4 Other donor funds and external funding

On an international level (United Nations) it is acknowledged that developing countries lack sufficient means to care for their environment and nature conservation adequately. To furnish at least part of the necessary means a number of international funding agencies have been established, such as the Global Environment Facility (GEF). The Netherlands Antilles however, are not eligible for funding from such international sources, because globally the Netherlands Antilles, as part of the Kingdom of the Netherlands, is considered to be a developed country. The United Kingdom, faced with a similar "sent from pillar to post" problem for their "neither fish nor fowl" overseas territories, subsequently established its own substitute fund specifically for environmental projects in its overseas territories based on so-called 'environmental charters' with each territory. A similar approach might well be worth considering for the Kingdom of the Netherlands.

Other possible sources of financing include EU funding mechanisms (average annual flow of European Development Fund to the Netherlands Antilles between 1986 and 1999 was NAf 7.2 million) and some international organizations. There are several funding sources available for projects implemented by NGOs or private sector. Two 'funding handbooks' were published by MINA to provide an overview of such sources¹. MINA will continue to alert the network of environmental organizations when funding opportunities arise. In addition the KNAP and MINA Funds can fund small environmental projects

¹ "Handboek Fondsen voor Natuur Nederlandse Antillen." Section Environment and Nature Conservation, Dept. Public Health and Environmental Hygiene, March 1999;

[&]quot;Handboek Fondsen voor Milieu en Energie Nederlandse Antillen." Section Environment and Nature Conservation, Dept. Public Health and Environmental Hygiene, March 1999.

The islands remain responsible for funding their own environmental activities and should allocate sufficient funds for that on their budgets. The islands too however, are constrained by lack of means. This makes it even more important that the priority themes in this policy plan, which have been carefully selected in close cooperation with the islands, are reflected where possible in the island budgets, so that both island and central government spending on environment is directed in unison. Development policy in the Netherlands Antilles also requires any projects applying for funding from the cooperative means to be evaluated on whether they fit in the national framework.

Where possible and relevant, MINA will undertake joint activities with the islands and accordingly contribute financially. Such activities will be reflected in the year plans, which specify in detail the activities to be started each year, including detailed budgets. MINA can also provide assistance in the drafting of plans, legislation and corresponding budgets for environment or nature conservation.

The amount of anticipated funds from other donors and external funding (estimated NAf 665,000 for four years) consist of the following sources:

- International funding organizations, i.e. the US National Fish & Wildlife Fund (NFWF) and the International Coral Reef Action Network (ICRAN) that support coral reef conservation programs;
- Dutch 'sister' ministries, i.e. Agriculture, Nature Conservation and Food Safety (LNV), and Public Housing, Planning and environment (VROM) that support nature conservation and environmental incentive programs, in this case the KNAP and the MINA Funds
- Private sector and NGO sponsoring for volunteer coral reef monitoring programs

7.5 Private sector

For some activities a user or a polluter will be charged directly or indirectly by way of a levy system, to support the necessary management system. This not only refers to fees for entrance to nature areas, for waste disposal, or for CITES permits, but also, for instance, to environmental inspections of large or complicated companies. Revenues generated with such mechanisms must then again benefit the environment or nature conservation.

Over the period covered by this NEP Plan no specific levies or funding from private sector parties is foreseen. Fees for CITES permits, expected to be levied by the Central Government during the coming period, will all go to the general means.

As part of the efforts of increasing public support and cooperation with partners from society, subsidies can be granted in the future. To prevent long term dependency of subsidized organizations and to insure we "get our money's worth", subsidy policy will be result oriented, requiring tangible results and a project-based approach. Subsidy policy will be formulated in close consultation with the Directorate of Finance, and other departments, services and research organizations.

7.6 Total funding

Total estimated costs of all identified projects and activities that reflect the already prioritized ambitions of the Central Government add up to NAf 11.2 million. The cost indications only comprise direct costs, i.e. not including salaries and overhead costs provided by the Directorate of Public Health. The following table gives an overview of the budgets (x 1000 NAf) for the various policy issues and their anticipated financing sources.

NEP-PLAN PRIORITY	CENTRAL GOVERNMENT	DONORS	TOTAL
Waste and waste-water management	70	750	820
Oil & environment		650	650
Sustainable tourism	-	110	110
Biodiversity conservation & management	60	3,270	3,330
Sustainable energy	20	160	180
Education and public awareness	120	3,270	3,390
Legislation, standardization and enforcement	60	450	510
Cooperation	1,140		1,140
National Exploration of the State of the Environment	_	1,050	1,050
Total	1,470	9,710	11,180

8 Implementation

8.1 Input

The inputs that are needed for each of the activities within the scope of this environmental and nature conservation policy plan are indicated in the various policy documents and white papers addressing specific themes. Four policy advisors work together to implement the tasks set in this policy plan. A small part (± NAf 100,000 yearly) of the budget of the Directorate of Public Health is available as budget for environmental and nature conservation policy in addition the Directorate of Public Health provides for the fixed expenses management, salaries, and maintenance costs for MINA a total yearly amount of ± NAf 375,000.

There are two incentive funds: the Fund for Small Nature Conservation Projects Netherlands Antilles (KNAP Fund), and the Environmental Fund Netherlands Antilles (MINA Fund) that provide grants for environmental and nature conservation organizations, neighborhood organizations, private sector, etc. to implement projects of their own conception that fit within the scope of this policy plan

Implementation of this policy plan will be in cooperation with central and island government departments/services, NGO's, private nature conservation organizations, related Dutch ministries; the private sector, the educational sector, the media, and neighborhood organizations.

A source of some concern for the future is the extremely limited lo cal availability of capacity for the many tasks in the field of envi ronmental and nature conservation. Various islands have had difficulty in filling vacancies for academically qualified professionals in their environmental departments. NGOs also find it difficult or even impossible to find qualified local applicants for positions such as Park Manager, There appears to be a paucity of academic level educated Antilleans with expertise or affinity for environmental areas. Nor does it seem that there is a next generation of such professionals coming. This is a dangerous situation if the islands are to achieve sustainable development. In the present situation there is already insufficient capacity to deal with all the environmental issues that need attention; any additional vacancy in the environmental departments of either the central government or the islands, would be quite serious. An effort must be made to promote environmental studies more, to stimulate students to specialize in environmental fields, and subsequently to stimulate them to practice their profes sion in the Netherlands Antilles MINA can play a small role in this by coaching interns within the limits of its capacity, but at present there seems to be no local interest in such internships.

8.2 Organization and implementation procedures

For the implementation of the first Policy Plan, "Contours of Environmental and Nature Conservation Policy" a coordinating mechanism was set up for the spending of the cooperative means of BVK, the so-called BOM team (Bestedingen Overleg Milieu—Environment Spending Consultation). This operating procedure, tailored on the principle that bureaucracy should be reduced to a minimum—though not at the expense of financial transparency—proved to be an effective tool. It would seem obvious then to continue this procedure in the new planning period, and a similar mechanism is strongly recommended.

8.3 Time Planning

A tentative outline of the planning of the main themes and subjects is provided in the table on page 44. The activities listed are general, providing room for sub activities that will be specified in detail in the year plans. Every year the activities will be evaluated and a detailed schedule and budget of the activities for the upcoming year will be prepared

8.4 Budget

A detailed budget with an exact listing of activities over a four year period is difficult to predict and calculate with any exactness. Consequently the activity schedule on the next page is only indicative of the costs. For activities falling under 'implementation of the Nature Policy Plan', the estimates have been taken from the Nature Policy Plan when available. Other estimates have been based on experience from the implementation of previous policy plans.

This schedule should not be seen as any more than a general indication of the total budget with a rough indication of intended activities. Every year an activity plan will be made with a detailed list of specific activities tuned to the available capacity and tailored to most effectively achieve the goals for each of the priority themes of this four-year Environmental and Nature Conservation Policy Plan. A corresponding, more detailed budget will be presented for each of those activities where possible. When the activity is actually ready to start the costs will be carefully actualized.

The cost indications in this schedule only comprise direct costs, i.e. not including salaries and overhead costs provided by the Directorate of Public Health.

8.5 Relevant Government Measures

The Government is working on the structural implementation or the intentions of the Environment and Nature Conservation Policy Plan. Draft legislation and policy plans are being formulated, some of which have already been passed. Where possible the principle of 'the polluter pays' is taken into account. Thus, the models for island waste management ordinances and waste water ordinances provide mechanisms to charge for public services. The National Environment Ordinance, now in the final stages of procedure before it can be passed, like the National Nature Conservation Ordinance, provides time limits within which the islands must pass required island legislation and establish island policy plans.

8.6 Schedule of activities

	cost	Τ.,	Ι	Τ	Τ	Ŧ	<u> </u>	1
SUBJECT	indication 2004-07	§	2005	20	2007	islands	vso	third
	2004-07		<u> </u>			Islands	V30	parties
WASTE MANAGEMENT		,	, .			, <u>.</u>		
assist islands in achieving basic and target level waste management, including hazardous waste	500,000	1	×	. ×		> 10		
Standards, regulations, convention compliance, data collection, island legislation and policy plans	60,000	X	X	X	×		60,000	
support cooperation through AMUST		×	х	х	х			
WASTE WATER MANAGEMENT	560,000	ני					60,000	
assist islands with wastewater management plans, bottlenecks,	210,000) x	х	x	х	> 5 mln.	10,000	
and ordinances					1-		10,000	
development of waste water standards	50,000	x	x	t				
capacity building waste water management personnel*		х	х	х	×			
OIL & ENVIRONMENT	260,000)]					10,000	
cost benefit analysis oil industry Curação		Х		x				
standards, conventions, mapping, and inspection	650,000		х	х	х	~1 mln.		
SUSTAINABLE TOURISM	650,000						0	0
promote environmentally sound practices in the tourism sector	110,000	x.	х	х	X		1	
	<u> </u>	1					 	
BIODIVERSITY CONSERVATION & MANAGEMENT	110,000]					0	0
implementation national nature policy plan (database, research, pilots,	865,000	x	X	х	х		55,000	
aw areness, genetic resource guidelines, monitoring, and exchange)			*	1	-			
sustainable management Saba Bank (special management area, biodiversity survey, management plan, PSSA designation, and management)	2,100,000	×	×	×	 X			
sustainable nature conservation (completion trustfund study, identify, coordinate and administer funding, CINA assistance)	- H-haboren and a same and	×	X	X		4 el -hua -	arram the set a dear security	
NACRI activities (reef monitoring, pilot projects, exchange)	285,000	×	X	х	x		5,000	165,000
sustainable fisheries policy (surveys, stock analysis high seas regulation)	80,000	×	×	x	×			·
ngi odd rogadion,	3,330,000	┝╌╵		!			60,000	165,000
SUSTAINABLE ENERGY							00,000	100,000
promote energy saving, renew able energy and exchange	140,000 40,000	X	×	×	×			_
inventory, carbon balance, and policy formulation			X	х	×		20,000	
EDUCATION & PUBLIC AWARENESS	180,000	l					20,000	0
production and distribution of information and education materials,	970,000	X	x	х	X			
develop partnerships and awareness/education programs KNAP Fund	4 040 000	_	_					
MINA Fund	1,040,000 1,380,000	X	X	X	*		40,000 80,000	200,000
	3,390,000	^	<u> </u>	^	^ [120,000	300,000 500.000
LEGISLATION, STANDARDIZATION & ENFORCEMENT	-,,						,000	555,000
national environmental policy plan, environmental standards/regulations, Island legislation, enforcement, and set-up of inspectorate	510,000	x	X	X	x	namen of the state of the same of	60,000	······································
COOPERATION	510,000						60,000	
cooperation (island focal points, NANCIw eb, Carmabi, VROM,	1,140,000	χŢ	× [χT	x		1,140,000	
LNV, V&W, international)				-	-			
NATIONAL EXPLORATION OF THE STATE OF THE ENVIRONMENT	1,140,000					ł	1,140,000	0
"National Exploration of the State of the Environment Netherlands Antilles"	1,050,000	v I	γT	ψT	-	· · ·		
(including terms of reference)		-2	<u> </u>	X				
L	1,050,000					į		
Grand total	11,180,000					[1,470,000	665,000
			9,	04	5,00			
	L		_					

Nature & Environment Policy Plan Netherlands Antilles 2005-2008

9 Monitoring and Evaluation

This four-year environmental policy plan sets down the intentions of the central government for the coming four years. Year plans will be prepared every year that will include the activities of the central government, and it available of the island governments as well. As the year plan is prepared the progress of the various ongoing or concluded activities that year will also be reported:

In order to accurately measure the actual progress achieved by projects, output and effect indicators are necessary. It is however not always possible to formulate precise effect indicators where effects are often qualitative changes in awareness for instance, instead of readily quantifiable entities. In this four-year environment plan that often does not discuss specific activities but rather presents the framework within which activities are further specified each year, we were unable to define effect indicators everywhere. In the year plans however, where possible, effect indicators will be defined for each project or activity, or derivative effect indicators will be substituted that can provide a measure of the true effect.

One of the difficulties in defining effect indicators is often the lack of exact data about the existing, or baseline, situation. When, for example, it is unknown what percentage of the population is actually supportive of environmental conservation and why or what percentage of eutrophied groundwater is polluting the sea, it is of course impossible to say that an activity will improve either existing situation by so many percentage points. First it is necessary to establish a baseline, and that requires a major survey. Such a 'State of the Environment' survey will be started in the coming period and will provide a quantitative overview of the present state of the environment in the Netherlands Antilles as well as provide quantitative data on how people perceive the environment. It will be preceded by the drafting of detailed terms of reference. The first year plan stems ming from this policy plan will describe this survey in more detail.

10 References

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11 List of Acronyms

AMUST: Joint Waste Management and Technology Association [Asosashon Maneho Uni di Sushi i Tecnologia], 16

BOM: Environmental Spending consultation [Bestedingen Overleg Milieu], 58

BVK: Dutch Ministry of Government Reform and Kingdom Relations [Ministerie voor Bestuurlijke Vernieuwing en Koninkrijksrelaties], 5

CARMABI: Caribbean Research and Management of Biodiversity Institute, 47

CBD: Convention on Biological Diversity, 7

CEP: Caribbean Environment Program, 48

CFC: Chloro-Fluoro-Carbon [Chloor Fluor Koolstof - CFK], 44

CLC: Civil Liabilities Convention, 21

CO2: Carbon Dioxide, 44

DCNA: Dutch Caribbean Nature Alliance, 32

ERNA: Eilandenregeling Nederlandse Antillen [Island Regulation Netherlands Antilles, 1

FAO: Food & Agriculture Organization of the United Nations, 26, 63

FAPE: Antillean Foundation for Energy [Fundashon Antiyano Pa Energia], 35

GCRMN: Global Coral Reef Monitoring Network, 29

GEF: Global Environment Facility, 53

IAC: Inter-American Convention for the Protection and Conservation of Sea-Turtles, 46

ICRI: International coral Reef Initiative, 28

IMO: International Maritime Organization, 30

IUU: Illegal, Unregulated, and Unreported, 31

KNAP Fund: Fund for Small Nature Projects [Fonds voor Kleine NAtuurProjecten], 38

LBS: Land-Based Sources of Marine Pollution, 44

LNV: Dutch Ministry of Agriculture and Nature Conservation [Landbouw, Natuur en Voedselkwaliteit], 38

MARPOL 73/78: International Convention for the Prevention of Pollution from Ships, 1973, as modified by the Protocol of 1978 relating thereto, 21

MINA: Dept. of Environment & Nature Conservation [Afdeling Milieu & Natuur], 3

MINA Fund: Environmental Fund Netherlands Antilles [Milieufonds Nederlandse Antillen], 38

MPA: Marine Protected Area, 28

NACRI: Netherlands Antilles Coral Reef Initiative, 28

NEP: Nature & Environment Policy, 8

NGO: Non-Governmental Organization, 7

OPRC: Oil Pollution Preparedness, Response and Co-operation, 44

PSSA: Particularly Sensitive Sea Area, 30

RAC: Regional Activity Center, 48

Ramsar: Ramsar Convention on Wetlands of International Importance, 45

0 million and Date, Dies Nothenhands Astillas 2000 2000

REMPEITC: Regional Marine Pollution Emergency Information and Training Center of the IMO, 48

SIDS: Small Island Development States, 11

SPAW: Specially Protected Areas and Wildlife, 45

STAC: Scientific and Technical Advisory committee, 7

STIRANA: National Foundation for Disaster Preparedness [Stichting Rampenbestrijding Nederlandse Antillen, 22

Trb: Tractatenboek, 44

UNCED: United Nations Conference on Environment and Development, 11

UNEP: United Nations Environment Program, 48

UNESCO: United Nations Educational, Scientific and Cultural Organization, 49

V&W: Transport, Public Works and Water Management [Verkeer en Waterstaat], 48

VROM: Public Housing, Planning and environment [Volkshuisvesting, Ruimtelijke Ordening en Milieu], (Ministry of), 6

VSO: Ministry of Public Health and Social Development of the Netherlands Antilles [Volksgezondheid en Sociale Ontwikkeling], 38

WHS: World Heritage Site, 49

WSSD: World Summit on Sustainable Development (Rio plus 10), 49

WW2BW: White Water to Blue Water, 49